

AD-A128 693

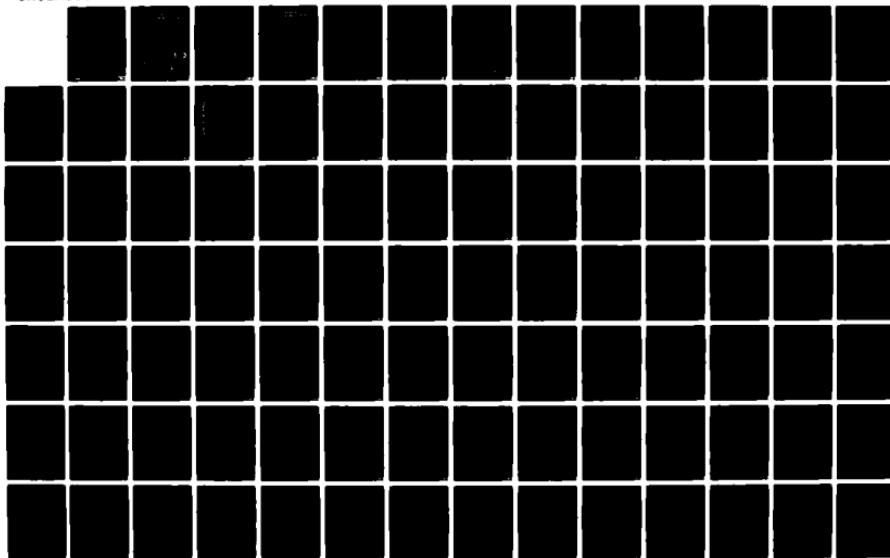
FAA STATISTICAL HANDBOOK OF AVIATION CALENDAR YEAR 1981
(U) FEDERAL AVIATION ADMINISTRATION WASHINGTON DC
OFFICE OF MANAGEMENT SYSTEMS 31 DEC 81

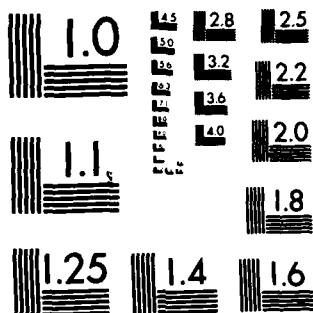
1/2

F/G 1/2

NL

UNCLASSIFIED





MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

12

FAA Statistical Handbook of Aviation

Calendar Year 1981

AD A 128 693

DTIC FILE COPY

DISTRIBUTION STATEMENT A
Approved for public release;
Distribution Unlimited

DTIC
ELECTED
MAY 31 1983
S D
f B



83 05 27 03

Technical Report Documentation Page

1. Report No.	2. Government Accession No.	3. Recipient's Catalog No.	
AD-A128 693			
4. Title and Subtitle	5. Report Date		
FAA Statistical Handbook of Aviation		December 31, 1981	
6. Performing Organization Code	7. Author(s)		
AMS-220	Information Analysis Branch		
8. Performing Organization Report No.	9. Performing Organization Name and Address		
	Federal Aviation Administration Office of Management Systems 800 Independence Avenue, SW Washington, DC 20591		
10. Work Unit No. (TRAIS)	11. Contract or Grant No.		
12. Sponsoring Agency Name and Address	13. Type of Report and Period Covered		
Department of Transportation Federal Aviation Administration 800 Independence Avenue, SW Washington, DC 20951	Annual Calendar Year 1981		
14. Sponsoring Agency Code	15. Supplementary Notes		
FAA			
16. Abstract	>This report presents statistical information pertaining to the Federal Aviation Administration, the National Airspace System, Airports, Airport Activity, U.S. Civil Air Carrier Fleet, U.S. Civil Air Carrier Operating Data, Airmen, General Aviation Aircraft, Aircraft Accidents, Aeronautical Production and Imports/Exports, and a Glossary of the terms used in this publication.		
17. Key Words	18. Distribution Statement		
Air carrier, airport, air traffic, airmen, aircraft accidents, general aviation, aeronautical production.	Document is available to the public through the National Technical Information Service, Springfield, Virginia 22161		
19. Security Classif. (of this report)	20. Security Classif. (of this page)	21. No. of Pages	22. Price
Unclassified	Unclassified		

83 05 27 031



FAA Statistical Handbook of Aviation

Calendar Year 1981

Availability is unlimited. Document may be released to the National Technical Information Service Springfield, Virginia 22161, for sale to the public

For sale by the Superintendent of Documents, U.S. Government Printing Office
Washington, D.C. 20402

PREFACE

The FAA Statistical Handbook of Aviation is published annually by the Federal Aviation Administration (FAA). Its prime purpose is to serve as a convenient source for historical data, and to assist in evaluating progress. This edition contains data on major civil aviation activities for the period ending December 31, 1981.

The handbook should provide a valuable source of information for the Department of Transportation (DOT), operating offices of the FAA, the Civil Aeronautics Board (CAB), and other government agencies, as well as non-government organizations interested in aviation.

Chapter I deals with the FAA and its functions. This section also includes a comparison of the agency's appropriations from fiscal years 1978-1982, and the agency's personnel complement for 6-month intervals from June 30, 1972, to December 31, 1981.

National Airspace System data reflecting the workload of the FAA air traffic facilities--terminal and en route--are contained in Chapter II. This chapter contains air traffic activity reported by FAA-operated airport traffic control towers, air route traffic control centers, and domestic and international flight service stations.

Selected statistics concerning the Nation's Airport Facilities are presented in Chapter III by state within FAA regions. In addition to the total count of these facilities, this chapter includes statistics pertaining to the physical characteristics (paved vs. unpaved runways, lighted vs.

unlighted runways, length of runways, etc.), size of populated areas served, funds allocated for airport development, etc.

Airport activity statistics comprising Chapter IV were prepared from data published in the calendar year 1981 edition of Airport Activity Statistics of the Certificated Route Air Carriers, issued jointly by the CAB and the FAA. In addition, this chapter presents individual passenger and traffic activity data from some of the Nation's international airports.

The U.S. Civil Air Carrier Fleet, as of December 31, 1981, is described in detail in Chapter V. These statistics were developed from Monthly Aircraft/Engine Utilization Reports submitted by the air carrier operators. The aircraft population discussed here is not an inventory of the aircraft owned by the air carriers, but represents the aircraft actually used by the air carrier fleet during December 1981.

U.S. Civil Air Carrier Operating Data--revenue passenger miles flown, available seat-miles and enplanements, revenue ton-miles flown, revenue aircraft miles flown, personnel, payroll, average salary, and operating revenues and expenses of the certificated route air carriers--are presented in Chapter VI. These statistics were obtained from schedules submitted by the certificated route air carriers to the CAB.

The Airmen data shown in Chapter VII were obtained from official airmen certification records maintained by the FAA Aeronautical Center in Oklahoma City, Oklahoma.

The general aviation aircraft data presented in Chapter VIII were collected from the General Aviation Activity and Avionics Survey. Numbers of active aircraft and hours flown are shown for each aircraft type.

Aircraft Accidents, both air carrier and general aviation, appear in Chapter IX. These data were furnished by the National Transportation Safety Board (NTSB). There have been major changes to data reported by NTSB which were dictated by deregulation and by the proliferation of small, regional airlines and commuters. (These changes begin with the 1981 data.)

Aeronautical Production and Imports/Exports are summarized in Chapter X. The production information was obtained from reports submitted to the U.S. Bureau of the Census by all known producers of complete aircraft and aircraft engines. Imports/exports data were obtained through Aerospace Industries Association, Inc. based on Bureau of the Census data from special monthly compilation of census data from special monthly compilation of annual reports FT-446 and FT-410, respectively.

The FAA Statistical Handbook of Aviation is prepared by the Information Analysis Branch, Information and Statistics Division, Office of Management Systems, with the cooperation of other FAA and DOT offices. Appreciation is expressed to the Civil Aeronautics Board, U.S. Bureau of the Census, U.S. Department of Labor, Interstate Commerce Commission, Immigration and Naturalization Service, and many municipalities and private organizations for their assistance.



Accession For	
NTIS GRA&I <input checked="" type="checkbox"/>	
DTIC TAB <input type="checkbox"/>	
Unannounced <input type="checkbox"/>	
Justification	
PER CALL ME	
By _____	
Distribution/	
Availability Codes	
Dist	Avail and/or Special
A	

CONTENTS

	<u>Page</u>
PREFACE	v
I. THE FEDERAL AVIATION ADMINISTRATION	1
1.1 FAA Appropriations: Fiscal Years 1978 - 1982	4
1.2 FAA Civilian Employees at End of Fiscal and Calendar Years 1972 - 1981	5
1.3 10-Year Breakdown of Number of Total FAA Employees as of December 31, 1972 - 1981	6
II. THE NATIONAL AIRSPACE SYSTEM	7
2.1 U.S. Air Route Airway Milage: 1972 - 1981	8
2.2 FAA Air Route Facilities and Services: 1972 - 1981	9
2.3 Air Traffic Activity at Air Route Traffic Control Centers, by Aviation Category--FISCAL YEARS 1977 - 1981	12
2.4 Air Traffic Activity at Airport Traffic Control Towers, by Aviation Category--FISCAL YEARS 1977 - 1981	13
2.5 Air Traffic Activity at FAA Facilities, by Aviation Category--FISCAL YEARS 1977 - 1981	14
2.6 Air Traffic Activity at Flight Service Facilities-- FISCAL YEARS 1977 - 1981	15
2.7 Aircraft Contacted at Flight Service Facilities-- FISCAL YEARS 1977 - 1981	16
2.8 Air Traffic Activity at Air Route Traffic Control Centers, by Aviation Category--CALENDAR YEARS 1977 - 1981	20
2.9 Air Traffic Activity at Airport Traffic Control Towers, by Aviation Category--CALENDAR YEARS 1977 - 1981	21
2.10 Air Traffic Activity at FAA Facilities, by Aviation Category--CALENDAR YEARS 1977 - 1981	22
2.11 Air Traffic Activity at Flight Service Facilities-- CALENDAR YEARS 1977 - 1981	23
2.12 Aircraft Contacted at Flight Service Facilities-- CALENDAR YEARS 1977 - 1981	24

CONTENTS (Continued)

	<u>Page</u>
III. AIRPORTS	27
3.1 Airports on Record With FAA: 1972 Through 1981	27
3.2 U.S. Civil and Joint-Use Airports, Heliports, Stolports, and Seaplane Bases and Reported Abandonments on Record, by FAA Region and State: December 31, 1981	28
3.3 U.S. Civil and Joint-Use Airports, Heliports, Stolports, and Seaplane Bases on Record by Type of Ownership: December 31, 1981	30
3.4 U.S. Civil and Joint-Use Airports, Heliports, Stolports and Seaplane Bases on Record Length by of Longest Runway: December 31, 1981	32
3.5 U.S. Civil and Joint-Use Airports, Heliports, Stolports, and Seaplane Bases on Record by FAA Region and State and Other Areas: December 31, 1972 - 1981	34
3.6 Airport Development Aid Program Status as of December 31, 1981	36
IV. AIR CARRIER PASSENGERS.	39
AIRPORT ACTIVITY OF CERTIFICATED ROUTE AIR CARRIERS	41
4.1 Certificated Route Air Carriers: December 31, 1981	45
4.2 Airline Traffic Enplaned at U.S. Stations: 1972 - 1981.	46
4.3 American Flag Airline Traffic Enplaned at Territorial U.S. Stations: 1972 - 1981	47
4.4 American Flag Airlines Traffic Enplaned at Foreign Stations: 1972 - 1981	48
4.5 Domestic Helicopter Traffic Enplaned at U.S. Stations: 1972 - 1981	49
4.6 Total All-cargo Airline Traffic Enplaned at U.S. Stations: 1972 - 1981	49
4.7 Summary of Aircraft Departures, Enplaned Revenue Passengers and Enplaned Revenue Tons of Cargo and Mail by Type of Operation, by Type of Service, by Carrier Group, and by Air Carrier	50

CONTENTS (Continued)

	<u>Page</u>
4.8 Summary of Aircraft Departures, Enplaned Revenue Passengers, and Enplaned Revenue Tons of Cargo and Mail by Type of Operation, by Type of Service, by State and Country	54
4.9 Aircraft Departures, Enplaned Revenue Passengers, and Enplaned Revenue Tons of Cargo and Mail in Total Operations, All Services at Large Air Traffic Hubs: 12 Months Ended December 31, 1981	62
4.10 Aircraft Departures, Enplaned Revenue Passengers, and Enplaned Revenue Tons of Cargo and Mail in Total Operations, All Services at Medium Air Traffic Hubs: 12 Months Ended December 31, 1981	64
4.11 Aircraft Departures, Enplaned Revenue Passengers, and Enplaned Revenue Tons of Cargo and Mail in Total Operations, All Services at Small Air Traffic Hubs: 12 Months Ended December 31, 1981	66
COMMUTERS	69
4.12 Commuter Air Carriers as of December 31, 1981	70
4.13 Commuter Air Carriers Reporting to CAB Scheduled Passenger Traffic, December 31, 1981	74
4.14 Passengers Destination by State of Origin for Calendar Year 1981	75
4.15 Domestic Intercity Passenger-Miles by Mode of Travel and Class of Service: 1972 Through 1981	76
V. U.S. CIVIL AIR CARRIER FLEET.	77
5.1 Composition of the U.S. Air Carrier Fleet by Type of Aircraft: December 1972 - 1981	78
5.2 Total Aircraft in Operation by U.S. Air Carrier Fleet by Type of Carrier and by Type of Aircraft: December 1980 and 1981	79

CONTENTS (Continued)

	<u>Page</u>
5.3 Composition of U.S. Air Carrier Fleet by Manufacturer and Model: December 1980 and 1981.	80
5.4 Total Flight Time by Type of Aircraft in U.S. Air Carrier Fleet: December 1980 and 1981.	82
5.5 Total Aircraft in Certificated Route Air Carrier Operations by Carrier and by Engine Type: December 1981	84
5.6 Aircraft in Operation by the Certificated Route Air Carriers by Manufacturer and Model: December 1972 - 1981	85
5.7 Aircraft in Operation by Supplemental Carriers, by Carrier, and by Engine Type: December 1981	86
5.8 Aircraft in Operation by Supplemental Carriers, by Manufacturer and Model: December 1979 - 1981	87
5.9 Aircraft in Operation by Commercial Operators, by Carrier, and by Engine Type: December 1981 (large aircraft only)	88
5.10 Aircraft in Operation by Commercial Operators, by Manufacturer and Model: December 1978 - 1981 (large aircraft only)	89
5.11 Total Aircraft in Operation by Commuter Air Taxi Operators by Carrier, and by Engine Type: December 1981 (multiengine aircraft in passenger operations only)	90
5.12 Aircraft in Operation by Commuter Air Taxi Operators, by Manufacturer and Model: December 1979 - 1981 (multiengine aircraft in passenger operations only)	93
5.13 Aircraft in Operation by Air Taxi Operators, by Carrier, and Engine Type: December 1981 (large aircraft only)	95
5.14 Aircraft in Operation by Air Taxi Operators by Manufacturer and Model: December 1978 - 1981 (large aircraft only)	96

CONTENTS (Continued)

	<u>Page</u>
5.15 Total Aircraft in Operation by All Cargo Air Service (Section 418) Operators by Carrier and Engine Type: December 1981 (large aircraft only)	97
5.16 Aircraft in Operation by All Cargo Air Service (Section 418) Operators by manufacturer and Model: December 1979 - 1981 (large aircraft only)	97
5.17 Aircraft in Operation by Air Travel Clubs by Carrier and Engine Type: December 1981 (large aircraft only)	99
5.18 Aircraft in Operation by Air Travel Clubs by Manufacturer and Model December 1979 - 1981 (large aircraft only)	99
VI. U.S. CIVIL AIR CARRIER FLEET OPERATING DATA	101
6.1 Traffic Data, All Service (Scheduled and Nonscheduled) of Certificated Route Air Carriers: 1980 and 1981	102
6.2 Revenue Aircraft Departures, Miles and Hours Flown, and Average Speed in All Domestic Services of the Certificated Route Air Carriers: 1972 Through 1981	103
6.3 Revenue Aircraft Departures, Miles and Hours Flown, and Average Speed in All International Services of the Certificated Route Air Carriers: 1972 Through 1981	104
6.4 Total Ton-Miles Available in All Services of the United States Air Carriers: 1972 Through 1981	105
6.5 Revenue Ton-Miles Flown in all Services by Certificated Route Air Carriers of the United States: 1972 Through 1981	105
6.6 Passenger Operations in Scheduled Domestic Service of Certificated Route Air Carriers: 1972 Through 1981	106
6.7 Passenger Operations in Scheduled International Service of the Certificated Route Air Carriers: 1972 Through 1981	106
6.8 Revenue Aircraft Miles Flown in All Services of Certificated Route Air Carriers: 1972 Through 1981	107

CONTENTS (Continued)

	<u>Page</u>
6.9 U.S. Supplemental Air Carrier Operations: 1977 - 1981	108
6.10 Operating Revenue of Domestic Passenger/Cargo Operators, Certificated Route Air Carriers: 1972 - 1981	109
6.11 Operating Expenses of Domestic Passenger/Cargo Operators, Certificated Route Air Carriers: 1972 - 1981	110
6.12 Operating Revenue of International/Territorial Passenger/ Cargo Operators, Certificated Route Air Carriers: 1972 - 1981	111
6.13 Operating Expenses of International/Territorial Passenger/ Cargo Operators, Certificated Route Air Carriers: 1972 - 1981	112
6.14 Operating Revenue of Domestic Operators, Certificated Route Air Carriers: 1972 - 1981	113
6.15 Operating Expenses of Domestic Operators, Certificated Route Air Carriers: 1972 - 1981	114
6.16 Operating Revenue of International Operators, Certificated Route Air Carriers: 1972 - 1981	115
6.17 Operating Expenses of International Operators, Certificated Route Air Carriers: 1972 - 1981	116
VII. AIRMEN	117
7.1 Estimated Active Pilot Certificates Held: December 31, 1972 - 1981	118
7.2 Estimated Women Actively Engaged in Aviation: December 31, 1972 - 1981	119
7.3 Pilot Certificates Issued, by Category: Calendar Years 1977 - 1981	120
7.4 Instrument Ratings Issued: 1981, 1980, 1977	121
7.5 Estimated Instrument Ratings Held, by Class of Certificates: December 31, 1980 and 1981	122
7.6 Estimated Active Helicopter Pilots by Class of Certificates: December 31, 1981	123

CONTENTS (Continued)

Page

7.7	Estimated Active Glider Pilots by Class of Certificates: December 31, 1981
7.8	Estimated Active Helicopter and Glider Pilots: December 31, 1977 - 1981
7.9	Estimated Total and Instrument Rated Pilots: December 31, 1977 - 1981
7.10	Estimated Active Pilot Certificates Held, by Category and Age Group of Holder: 1981, 1980, 1977
7.11	Estimated Active Nonpilots/Pilot Certificates Held, by Category and Age Group of Holder: 1981, 1980, 1977
7.12	Estimated Active Pilots and Flight Instructors by FAA Region and State: December 31, 1981
7.13	Estimated Active Nonpilot Airmen Certificates Held by FAA Region and State: December 31, 1981
VIII. GENERAL AVIATION AIRCRAFT	
8.1	Active General Aviation Aircraft by Aircraft Type and Primary Use: 1981
8.2	Active General Aviation Aircraft by Aircraft Type: 1977 - 1981
8.3	Active General Aviation Aircraft Total Hours Flown by Active Type and Primary Use: 1981.
8.4	Active General Aviation Aircraft Total Hours Flown by Aircraft Type: 1977 - 1981
8.5	Active General Aviation Aircraft Average Hours Flown by Aircraft Type: 1977 - 1981
8.6	Active General Aviation Aircraft and Hours Flown by FAA Region and State of Based Aircraft: 1981
IX. AIRCRAFT ACCIDENTS	
9.1	1981 Air Carrier and General Aviation Aircraft Accidents, Fatalities, and Fatality Rate
9.2	Fatal Accidents, Fatalities--All Scheduled Service Airlines: 1980 and 1981 (U.S. Air Carriers Operating Under 14 CFR 121)

CONTENTS (Continued)

	<u>Page</u>
9.3 Accidents, Fatalities, and Rates--All Scheduled Service Airlines: 1972 - 1981 (U.S. Air Carriers Operating Under 14 CFR 121)	147
9.4 Aircraft Accidents, Accident Rates and Fatalities--U.S. Certificated Route Air Carriers: 1972 - 1981	148
9.5 Aircraft Accidents, Fatalities, and Fatality Rate--U.S. Certificated Route Air Carrier Scheduled Domestic and International Passenger Service: 1972 - 1981	149
9.6 Aircraft Accidents, Fatalities, and Fatality Rate--U.S. Certificated Route Air Carrier Scheduled Domestic Passenger Service: 1972 - 1981	150
9.7 Accidents, Fatalities, and Fatality Rate--U.S. Certificated Route Air Carrier Scheduled International Passenger Service:	151
9.8 Accidents, Accident Rates and Fatalities--U.S. Supplemental Air Carriers all Operations: 1972 - 1981	152
9.9 Aircraft Accidents, Fatalities, and Fatality Rate--U.S. Supplemental Air Carrier Civil and Military Operations: 1972 - 1981	153
9.10 Aircraft Accidents, Fatalities, and Accident Rates--U.S. General Aviation Flying: 1972 - 1981	154
9.11 Aircraft Accidents, Fatalities, and Accident Rates--Commuter Air Carriers: 1977 - 1981 (U.S. Air Carriers Operating Under 14 CFR 135) All Scheduled Service	155
9.12 Aircraft Accidents, Accident Rates, and Fatalities-- Commuter Air Carriers: 1977 - 1981 (U.S. Civil Air Carriers Operating Under 14 CFR 135) All Scheduled Service	156
9.13 Comparative Accident Data: 1971 - 1980 (Passenger Fatalities per 100 Million Passenger-Miles)	157
9.14 1981 Airlines (Air Carriers Operating Under 14 CFR 121) Accidents, Fatalities, and Rates	158
9.15 Accidents, Fatalities, and Rates Airlines -- 1977 - 1981 (U.S. Air Carriers Operating Under 14 CFR 121) All Scheduled Service	159
9.16 Accidents, Fatalities, and Rates On-Demand Air Taxis -- 1977 - 1981 (U.S. Air Carriers Operating Under 14 CFR 135) Nonscheduled Operations	160

CONTENTS (Continued)

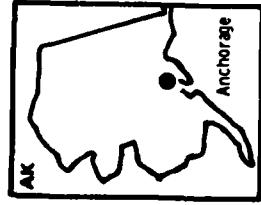
	<u>Page</u>
X. AERONAUTICAL PRODUCTION AND IMPORTS/EXPORTS	161
10.1 Total Civil Aircraft Production, Weight, and Cost Calendar Years 1972 - 1981	161
10.2 Number of Shipments of Complete Civil Aircraft	162
10.3 Number of U.S. Imports, 1977 - 1981	163
10.4 Number of U.S. Exports, 1977 - 1981	164
COMMON ACRONYMS	165
GLOSSARY	167

Illustrations

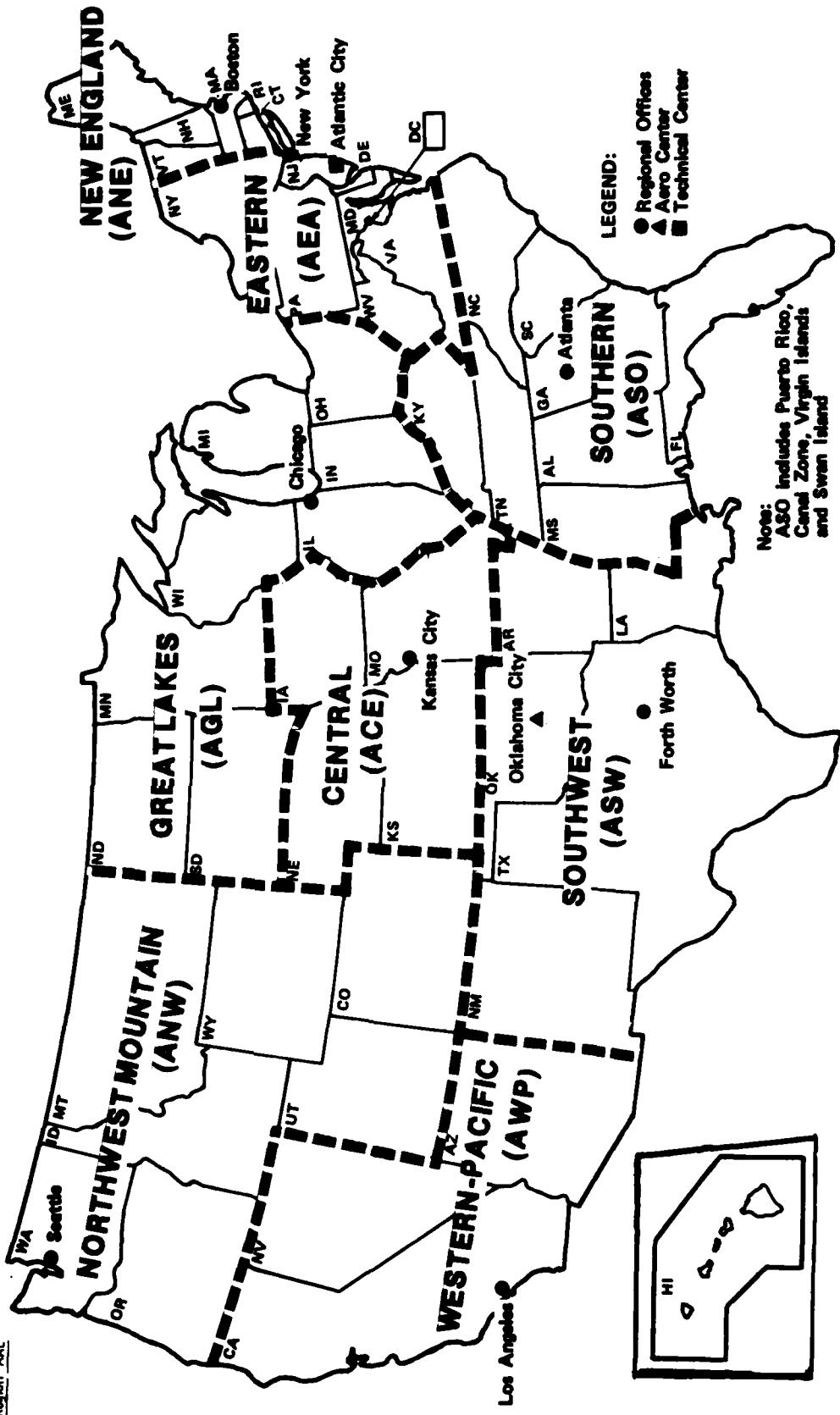
FAA REGIONAL BOUNDARIES	xviii
AIR TRAFFIC HUBS.	44

FAA REGIONAL BOUNDRIES

Includes Locations of Regional Headquarters and Centers



Alaskan Region AAL



I. THE FEDERAL AVIATION ADMINISTRATION

The Department of Transportation Act of 1966 established a new executive department known as the Department of Transportation. The general welfare, economic growth, stability, and security of the Nation pointed to the need for the development of national transportation policies and programs effectively utilizing the Nation's transportation resources. The Act provided for inclusion of the Federal Aviation Agency in the Department as the Federal Aviation Administration.

Directed by an Administrator, who is appointed by the President, by and with the advice and consent of the Senate, the FAA has as its primary function the fostering of the development and safety of American aviation. More specifically, the FAA is responsible for developing the major policies necessary to guide the long-range growth of civil aviation; modernizing the air traffic control system; establishing in a single authority the essential management functions necessary to support the common needs of civil and military operations; providing for the most effective and efficient use of the airspace over the United States; and for the rulemaking responsibilities relative to these functions.

The FAA constructs, operates, and maintains the National Airspace System and the facilities which are a part of the system; it allocates and regulates the use of the airspace; it ensures adequate separation between aircraft operating in controlled airspace; and, through research

and development programs, it provides new systems and equipment for improving utilization of the Nation's airspace.

The Federal Aid to Airports Program (FAAP) authorized the FAA to make grants of federal funds to sponsors for airport development and for advanced planning and engineering. Under FAAP, approximately \$1.2 billion were granted by FAA to airport sponsors for airport development purposes from 1947 through 1970. FAAP was superseded by the Airport Development Act of 1970. The FAA maintains and operates Washington National and Dulles International airports. Dulles International is the first airport in the world specifically designed for the use of commercial jet transports.

The FAA prescribes and administers rules and regulations concerning airmen competency, aircraft airworthiness, and air traffic control. It promotes safety through certification of airmen, aircraft, and flight and aircraft maintenance schools. It reviews the design, structure, and performance of new aircraft to insure the safety of the flying public.

Services provided by FAA toward the development of aviation and air commerce include:

Dissemination of news and information on civil aviation generally.

Publication of flight information data for pilots.

Technical aviation assistance to other governments, operation of overseas civil aviation missions, and the aviation training of foreign nationals.

Development of medical standards for airmen through aviation medical research.

Research and development in the field of aeronautics and electronics.

Other activities required to encourage and foster the world-wide development of civil aviation and air commerce.

Policies governing these programs are developed in the Washington headquarters of FAA, and are executed by field employees under the supervision of regional offices strategically located throughout the United States as well as the FAA Technical Center at Atlantic City, New Jersey, and the Mike Monroney Aeronautical Center at Oklahoma City, Oklahoma.

TABLE 1-1
FAA APPROPRIATIONS: FISCAL YEARS 1978 THROUGH 1982
(\$ IN MILLIONS)

APPROPRIATION	1978	1979	1980	1981	1982
TOTAL	<u>2,792.5</u>	<u>3,150.3</u>	<u>3,273.9</u>	<u>3,412.5</u>	<u>3,160.8</u>
OPERATIONS	1,628.3(A)	1,737.7(D)	1,849.5(G)	1,815.4	1,502.4(J)
OPERATIONS (AIRPORT AND AIRWAY TRUST FUND)	275.0	300.0	325.0	525.0	809.9(K)
FACILITIES AND EQUIPMENT (AIRPORT AND AIRWAY TRUST FUND)	209.0(B)	345.4(E)	292.8(H)	350.0	260.8
GRANTS-IN-AID FOR AIRPORTS (AIRPORT AND AIRWAY TRUST FUND)	555.0	644.1	677.0	570.5(I)	450.0
RESEARCH, ENGINEERING AND DEVELOPMENT (AIRPORT AND AIRWAY TRUST FUND)	80.8	75.1	75.0	85.0	71.8(L)
METROPOLITAN WASHINGTON AIRPORTS	27.8	29.5	34.1	45.4	57.1(M)
FACILITIES, ENGINEERING, AND DEVELOPMENT	16.6(C)	18.5(F)	20.5	21.2	8.8

- (A) INCLUDES \$5.6 ADDITIONAL OBLIGATIONAL AUTHORITY TRANSFERRED FROM OTHER ACCOUNTS.
- (B) INCLUDES \$9.0 REAPPROPRIATION.
- (C) INCLUDES \$2.4 ADDITIONAL OBLIGATIONAL AUTHORITY TRANSFERRED FROM OTHER ACCOUNTS.
- (D) INCLUDES \$5.0 ADDITIONAL OBLIGATIONAL AUTHORITY TRANSFERRED FROM OTHER ACCOUNTS.
- (E) INCLUDES \$54.4 REAPPROPRIATION.
- (F) INCLUDES \$.1 ADDITIONAL OBLIGATIONAL AUTHORITY TRANSFERRED FROM OTHER ACCOUNTS.

- (G) INCLUDES \$5.0 ADDITIONAL OBLIGATIONAL AUTHORITY TRANSFERRED FROM OTHER ACCOUNTS.
- (H) INCLUDES \$43.0 REAPPROPRIATION.
- (I) INCLUDES \$120.5 REAPPROPRIATION.
- (J) INCLUDES \$204.0 PROGRAM AND PAY COST SUPPLEMENTALS.
- (K) INCLUDES \$9.9 PROGRAM SUPPLEMENTAL.
- (L) INCLUDES \$16.0 PROGRAM SUPPLEMENTAL.
- (M) INCLUDES \$.5 PAY COST SUPPLEMENTAL.

TABLE 1.2

FAA CIVILIAN EMPLOYEES AT END OF FISCAL AND
CALENDAR YEARS 1972 THROUGH 1981

DATE	FAA TOTAL PAID	FULL TIME PERMANENT			
		WASHINGTON OFFICE	WASHINGTON FIELD	OTHER FIELD	TOTAL PAID
6/72	53,295	2,634	871	48,767	52,272
12/72	52,497	2,535	894	48,214	51,643
6/73	53,646	2,585	852	49,190	52,627
12/73	53,322	2,533	875	48,740	52,148
6/74	56,386	2,739	1,010	50,212	53,961
12/74	55,820	2,669	981	50,226	53,876
6/75	57,678	2,819	960	51,126	54,905
12/75	56,732	2,774	922	50,999	54,695
6/76	59,064	2,910	948	52,264	56,122
9/76	58,438	2,880	944	52,167	55,991
12/76	57,790	2,842	953	51,728	55,523
9/77	58,081	2,683	940	52,137	55,760
12/77	57,631	2,612	926	51,891	55,429
9/78	57,494	2,303	909	52,015	55,227
12/78	57,005	2,272	921	51,747	54,940
9/79	56,435	2,124	888	51,432	54,444
12/79	56,394	2,144	922	51,498	54,564
9/80	55,361	2,060	918	50,560	53,538
12/80	55,340	2,069	942	50,500	53,511
9/81	42,590	1,951	*185	39,123	41,259
12/81	44,640	1,940	*190	40,378	42,508

NOTE: FAA TOTAL PAID INCLUDES FULL-TIME, PART-TIME, AND INTERMITTENT.
 FULL-TIME INCLUDES PERMANENT PAID FULL-TIME EMPLOYEES WHO OCCUPY
 PERMANENT POSITIONS.

WASHINGTON OFFICE INCLUDES ALL PAID WASHINGTON HEADQUARTERS
 EMPLOYEES WHOSE DUTY STATION IS WASHINGTON, D.C.

WASHINGTON FIELD INCLUDES ALL PAID WASHINGTON, D.C. (E.G., NATIONAL
 AND DULLES AIRPORTS, IN OTHER STATES, OR FOREIGN COUNTRIES).

*BEGINNING WITH 1981 EMPLOYEES FROM NATIONAL AND DULLES AIRPORTS ARE
 REPORTED UNDER "OTHER FIELD".

OTHER FIELD INCLUDES ALL PAID EMPLOYEES WHOSE DUTY STATIONS ARE IN
 THE REGIONS OR CENTERS.

TABLE 1.3

10-YEAR BREAKDOWN OF NUMBER OF TOTAL FAA EMPLOYEES AS OF DECEMBER 31, 1972 - 1981

ORGANIZATIONAL GROUP	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981
AIR TRAFFIC CONTROL SPECIALISTS	24,263	24,871	26,353	26,790	27,359	27,754	27,688	27,783	27,190	17,418
ELECTRONICS TECHNICIANS	8,807	8,889	8,967	9,149	9,396	9,423	9,423	9,209	8,871	8,432
AVIATION SAFETY INSPECTORS	2,096	2,079	2,091	2,082	2,039	1,982	1,999	2,016	2,038	1,942
ENGINEERS	2,394	2,401	2,500	2,597	2,697	2,649	2,576	2,501	2,436	2,274
ALL OTHERS	14,937	15,083	15,909	16,114	16,299	15,823	15,319	14,885	14,805	14,574
TOTAL EMPLOYMENT	52,497	53,323	55,820	56,732	57,790	57,631	57,005	56,394	55,340	44,640

II. The National Airspace System

This chapter furnishes terminal and en route air traffic activity information of the National Airspace System for fiscal and calendar years. The data have been reported by the FAA-operated Airport Traffic Control Towers, Air Route Traffic Control Centers, and Flight Service facilities (Flight Service Stations, Combined Station/Towers and International Flight Service Stations). These reports are used as a guide in determining the need for larger or additional facilities, and possible changes in the number of personnel at existing facilities.

Data for towers are reported on Airport Operations and Instrument Operations for VFR Towers Monthly Summary (FAA Form 7230-1), Instrument Operations and Stage III/TCA Monthly Summary (FAA Form 7230-26), and Instrument Approaches Monthly Summary (FAA Form 7230-12). Airport operations are landings and takeoffs reported by towers by aviation categories--air carrier, and air taxi, general aviation, and military. Instrument operations are takeoffs, landings, and overflights of aircraft operating in accordance with an IFR flight plan. Instrument approaches are approaches made to an airport by an aircraft on an IFR flight plan under IFR weather conditions. Data for Air Route Traffic Control Centers (ARTCCs) are reported on ARTCC Operations and Oceanic Operations Monthly Summary (FAA Form 7230-14). Data contained on this form show departures, overs, and aircraft handled. Activity of Flight Service Stations, international flight service stations, and combined station/towers is submitted on Monthly Activity Record--Flight Service Stations (FAA Form 7230-13). More detailed data pertaining to activity of these facilities may be found in the fiscal year 1981 edition of FAA Air Traffic Activity.

TABLE 2.1

U.S. AIR ROUTE AIRWAY MILEAGE: 1972 - 1981*

(CONTIGUOUS 48 STATES)

DECEMBER 31	VERY HIGH FREQUENCY VOR/VORTAC		
	LOW ALTITUDE		JET ROUTES
	DIRECT	ALTERNATE	
1972	143,241	33,436	117,417
1973	144,578	32,999	119,672
1974	144,939	32,999	122,372
1975	148,834	32,320	123,258
1976	150,172	31,888	130,160
1977	152,947	31,270	131,968
1978	155,242	31,235	134,709
1979	157,853	31,625	135,920
1980	159,008	31,409	137,503
1981	160,823	29,137	138,550

* MILEAGE SHOWN IN NAUTICAL MILES BASED ON NATIONAL OCEAN SURVEY FIGURES.

TABLE 2.2
FAA AIR ROUTE FACILITIES AND SERVICES: 1972 THROUGH 1981

DECEMBER 31	VUR VUR/TAC	NONDIREC- TIONAL BEACONS	AIR ROUTE TRAFFIC CONTROL CENTERS	AIRPORT TRAFFIC CONTROL TOWERS	COMBINED STATION/ TOWERS	FLIGHT SERVICE STATIONS	INTER- NATIONAL FLIGHT SERVICE STATIONS	INSTRUMENT LANDING SYSTEMS	AIRPORT SURVEIL- LANCE RADAR
1972	991	706	27	555	42	524	7	405	125
1973	995	739	27	403	29	515	7	467	142
1974	1,000	795	27	417	21	520	7	490	156
1975	1,011	848	26	487	21	521	7	580	177
1976	1,020	920	25	488	16	521	7	640	175
1977	1,021	959	25	495	7	519	7	678	182
1978	1,020	988	25	494	7	519	6	698	185
1979	1,028	1,015	25	499	5	518	6	755	192
1980(R)	1,057	1,055	25	502	4	517	6	796	192
1981	1,055(A)	1,125(B)	25(C)	501(D)	1	516	6	844(E)	199(F)

(A) INCLUDES 66 NONFEDERAL AND 40 MILITARY.

(B) INCLUDES 768 NONFEDERAL AND 53 MILITARY.

(C) INCLUDES 5 MILITARY COMBINED CENTER/RADAR APPROACH CONTROL FACILITIES (CLRAP).

(D) INCLUDES 35 NONFEDERAL AND 35 MILITARY.

(E) INCLUDES 12 LANDING DIRECTIONAL AID (LDA), 79 NONFEDERAL, AND 5 MILITARY.

(F) INCLUDES 22 MILITARY.

(R) REVISED

FISCAL YEARS
(TABLES 2.3 - 2.7)

TABLE 2.3—AIR TRAFFIC ACTIVITY AT AIR ROUTE TRAFFIC CONTROL CENTERS, BY AVIATION CATEGORY—FISCAL YEARS 1977-1981

	Year	Total	Air Carrier	Air Taxi	General Aviation	Military	Annual change
		Annual change	Total	Annual change	Total	Annual change	
IFR Aircraft Handled 1/							
1981	29,531,111	-2	12,979,294	-6	2,894,149	+12	8,966,862
1980	30,061,372	+1	13,877,977	-1	2,573,776	+11	8,892,404
1979	29,909,712	+7	14,003,540	+3	2,328,243	+20	8,827,100
1978	28,055,382	+8	13,642,071	+5	1,931,216	+19	7,813,848
1977	25,973,299	—	12,986,985	—	1,639,300	—	6,856,057
							—
IFR Departures							
1981	11,492,966	-1	4,588,720	-7	1,397,865	+12	3,860,868
1980	11,657,684	(*)	4,914,458	-3	1,242,419	+11	3,851,188
1979	11,645,499	+6	5,042,781	+1	1,115,835	+21	3,819,669
1978	11,007,775	+8	5,014,806	+5	923,731	+18	3,387,877
1977	10,178,872	—	4,790,929	—	781,158	—	2,971,633
							—
IFR Owers							
1981	6,545,179	-3	3,801,854	-6	98,419	+11	1,245,126
1980	6,746,004	+2	4,049,081	+3	88,938	-8	1,190,028
1979	6,618,714	+10	3,917,977	+8	96,573	+15	1,187,762
1978	6,039,832	+8	3,612,459	+6	83,754	+9	1,038,094
1977	5,615,555	—	3,405,127	—	76,984	—	912,791
							—

1/The number of IFR Departures multiplied by two to account for IFR approaches, plus the number of IFR Owers.

(*)Less than 0.5 percent.

NOTE: Fiscal year 1977 and future years will be based on the new fiscal year.

TABLE 2.4--AIR TRAFFIC ACTIVITY AT AIRPORT TRAFFIC CONTROL TOWERS, BY AVIATION CATEGORY--FISCAL YEARS 1977-1981

	Year	Total	Air Carrier	Air Taxi	General Aviation		Military	
		Total	Annual change	Total	Annual change	Total	Annual change	Total
<u>Total Aircraft Operations</u>								
1981	61,570,457	-7	9,487,963	-7	4,876,365	+6	44,644,432	-9
1980	66,195,066	-4	10,148,956	-2	4,584,706	+5	48,972,784	-5
1979	69,039,372	+3	19,406,570	+3	4,370,514	+16	50,716,626	+2
1978	67,173,434	+1	10,063,259	+3	3,773,484	+14	50,798,779	(*)
1977	66,724,291	---	9,770,137	---	3,296,502	---	50,958,847	---
								2,698,805
<u>Itinerant Operations</u>								
1981	42,028,268	-5	9,487,963	-7	4,876,365	+6	26,422,305	-7
1980	44,270,414	-3	10,148,956	-2	4,584,706	+5	28,324,110	-4
1979	45,415,572	+4	10,406,570	+3	4,370,514	+16	29,407,844	+3
1978	43,562,963	+3	10,063,259	+3	3,773,484	+14	28,515,850	+1
1977	42,425,767	---	9,770,137	---	3,296,502	---	28,101,396	---
								1,257,732
<u>Local Operations</u>								
1981	19,542,189	-11	---	---	---	---	18,222,127	-12
1980	21,924,652	-3	---	---	---	---	20,548,674	-7
1979	23,623,800	(*)	---	---	---	---	22,308,782	(*)
1978	23,610,471	-3	---	---	---	---	22,282,929	-3
1977	24,298,524	---	---	---	---	---	22,857,451	---
								1,441,073

(*)Less than 0.5 percent.

TABLE 2.5—AIR TRAFFIC ACTIVITY AT FAA FACILITIES, BY AVIATION CATEGORY—FISCAL YEARS 1977-1981

	Year	Total		Air Carrier		Air Taxi		General Aviation		Military	
		Total	Annual change	Total	Annual change	Total	Annual change	Total	Annual change	Total	Annual change
<u>Total Instrument Operations</u>											
1981	37,221,490	-3	10,164,678	-4	4,635,285	+12	18,530,746	-4	3,890,781	-5	
1980	38,176,549	+5	10,613,262	-1	4,128,782	+13	19,332,557	+8	4,101,948	+5	
1979	36,225,027	+8	10,737,637	+3	3,657,696	+19%	17,907,628	+10	3,922,066	+7	
1978	33,456,726	+6	10,421,496	+4	3,066,809	+20	16,310,259	+8	3,658,162	-2	
1977	31,518,742	—	10,053,440	—	2,563,882	—	15,150,698	—	3,750,782	—	
<u>Total Instrument Approaches 1/</u>											
1980	2,041,078	-18	732,576	-22	287,465	-9	933,671	-16	82,013	-6	
1979	2,482,606	+12	940,892	+10	315,804	+11	1,106,001	+10	87,366	-27	
1978	2,223,426	+25	853,853	+27	285,508	+47	975,766	+20	119,909	+11	
1977	1,776,691	—	670,064	—	194,347	—	813,612	—	108,299	+10	
<u>Total Instrument Approaches at Control Facilities</u>											
1981	1,700,659	-10	593,800	-16	267,118	+3	764,979	-9	79,762	-8	
1980	1,888,659	-18	706,505	-23	259,018	-10	841,586	-16	81,550	-28	
1979	2,316,633	+13	912,272	+11	287,972	+11	1,002,597	+15	113,792	+12	
1978	2,049,828	+27	820,143	+28	260,040	+49	868,313	+22	101,332	+10	
1977	1,618,381	—	640,895	—	174,015	—	710,941	—	92,530	—	

1/Includes instrument approaches at Air Route Traffic Control Centers.

(*)Less than 0.5 percent.

TABLE 2.6--AIR TRAFFIC ACTIVITY AT FLIGHT SERVICE FACILITIES--FISCAL YEARS 1977-1981

	Year	FLIGHT SERVICES 1/			FLIGHT PLANS ORIGINATED			AIRPORT ADVISORIES			PILOT BRIEFS		
		Total	Annual change	Total	Annual change	IFR-DVFR	Annual change	VFR	Annual change	Total	Annual change	Total	Annual change
<u>Flight Service Stations</u>	1981	62,611,058	-3	8,796,477	-2	6,470,117	-2	2,326,360	+36	17,696,818	-3	17,696,818	-3
	1980	64,234,861	-3	8,986,486	-5	6,586,842	-4	2,399,644	-6	3,054,352	-4	18,325,012	+2
	1979	66,389,687	+3	9,429,862	+4	6,866,112	+8	2,563,750	-4	3,191,382	-2	18,709,691	+3
	1978	64,690,843	+6	9,041,583	+5	6,369,364	+9	2,672,219	-3	3,244,961	+6	18,230,172	+8
	1977	60,928,168	--	8,607,414	--	5,858,565	--	2,748,849	--	3,054,885	--	16,852,412	--
<u>Combined Station/Towers</u>	1981	31,914	-26	5,188	-33	2,096	-38	3,092	-30	0	0	6,364	-19
	1980	42,947	-79	7,763	-80	3,364	-47	4,429	-86	0	0	7,851	-70
	1979	207,728	-15	38,610	-17	6,335	-8	32,275	-19	0	0	25,924	+2
	1978	244,156	-36	46,739	-27	6,923	-57	39,816	-17	0	0	25,447	-45
	1977	380,291	--	63,932	--	16,054	--	47,878	--	0	0	45,937	--
<u>International</u>	1981	2,727,550	-4	484,079	-10	206,543	-13	227,536	-7	10,468	+245	499,728	-2
<u>Flight Service Stations</u>	1980	2,845,010	-5	535,319	+2	236,705	+5	298,614	(*)	3,031	-14	511,243	-12
	1979	3,000,151	+16	525,880	+14	225,770	+13	300,110	+14	3,526	+98	582,011	+16
	1978	2,595,296	+15	462,282	+10	200,166	+13	262,116	+8	1,778	+10	499,914	+31
	1977	2,263,673	--	420,536	--	177,119	--	243,417	--	1,615	--	382,359	--

(*)Less than 0.5 percent.

TABLE 2.7—AIRCRAFT CONTACTED AT FLIGHT SERVICE FACILITIES, BY AVIATION CATEGORY—FISCAL YEARS 1977-1981

	Year	Total	Air Carrier	Air Taxi	General Aviation	Military		
		Annual change	Total	Annual change	Total	Annual change	Total	Annual change
Flight Service Stations								
1981	9,624,468	(*)	389,416	+1	913,839	+5	7,890,730	-1
1980	9,611,865	-5	386,280	-8	873,472	+4	7,942,063	-6
1979	10,110,581	-1	417,909	+4	839,552	(*)	8,420,876	(*)
1978	10,147,333	+1	401,192	+11	838,268	+10	8,382,210	+1
1977	10,008,516	---	359,899	---	763,995	---	8,308,058	---
IFR-DVFR								
1981	1,998,905	+2	302,920	-1	273,186	+5	1,294,318	+2
1980	1,956,797	-4	305,943	-9	260,024	+5	1,264,271	-4
1979	2,038,070	+6	336,739	+6	246,554	+13	1,317,357	+11
1978	1,917,549	+17	318,789	+14	218,344	+26	1,187,224	+21
1977	1,637,448	---	279,199	---	173,224	---	984,207	---
VFR								
1981	7,625,563	-1	86,496	+8	640,653	+4	6,596,412	-1
1980	7,655,068	-5	80,337	-1	613,448	+3	6,677,792	-6
1979	8,072,511	-2	81,170	-1	592,998	-4	7,103,519	-1
1978	8,229,784	-2	82,403	+2	619,924	+5	7,194,986	-2
1977	8,371,068	---	80,700	---	590,771	---	7,323,851	---

(*)Less than 0.5 percent.

NOTE: Fiscal Year 1977 and future years will be based on the new fiscal year.

TABLE 2.7—AIRCRAFT CONTACTED AT FLIGHT SERVICE FACILITIES, BY AVIATION CATEGORY—FISCAL YEARS 1977-1981—Continued

	Year	Total		Air Carrier		Air Taxi		General Aviation		Military	
		Total	Annual change	Total	Annual change	Total	Annual change	Total	Annual change	Total	Annual change
<u>Combined Station/Tower</u>											
1981	8,810	-25	49	-75	4,305	+14	3,663	-45	793	-44	
1980	11,659	-85	202	-63	3,767	-91	6,603	-76	1,087	-84	
1979	78,660	-21	550	-46	43,637	-24	27,798	-17	6,675	-13	
1978	99,784	-38	1,017	-76	57,712	-10	33,356	-59	7,699	-31	
1977	160,553	—	4,279	—	64,175	—	80,940	—	11,159	—	
<u>IFR-DVFR</u>											
1981	640	-67	46	-76	28	-67	487	-36	79	-52	
1980	1,213	-69	194	-64	86	-94	765	-28	168	-78	
1979	3,889	-10	540	-12	1,517	-5	1,057	-7	775	-32	
1978	4,333	-68	616	-81	1,443	-59	1,134	-76	1,140	-50	
1977	13,717	—	3,248	—	3,507	—	4,666	—	2,296	—	
<u>VFR</u>											
1981	8,170	-22	3	-62	4,277	+16	3,176	-46	714	-22	
1980	10,446	-86	8	-20	3,681	-91	5,838	-78	919	-84	
1979	74,771	-22	10	-98	42,120	-25	26,741	-17	5,900	-10	
1978	95,451	-35	401	-61	56,269	-7	32,222	-58	6,559	-26	
1977	146,836	—	1,031	—	60,668	—	76,274	—	8,863	—	

NOTE: Fiscal Year 1977 and future years will be based on the new fiscal year.

TABLE 2.7—AIRCRAFT CONTACTED AT FLIGHT SERVICE FACILITIES, BY AVIATION CATEGORY—FISCAL YEARS 1977-1981 - Continued

	Year	Total		Air Carrier		Air Taxi		General Aviation		Military	
		Total	Annual change	Total	Annual change	Total	Annual change	Total	Annual change	Total	Annual change
<u>International</u>	1981	759,936	+1	171,308	+14	186,745	-10	368,535	+2	33,348	+2
Flight Service Stations	1980	751,886	-4	149,765	+16	207,948	-12	361,565	-7	32,608	+9
	1979	784,369	+7	128,645	+23	235,570	+3	390,216	+27	29,938	-2
	1978	670,904	+2	104,468	-13	228,097	-4	307,929	+13	30,410	+20
	1977	656,683	—	120,170	—	238,397	—	272,870	—	25,246	—
<u>IFR-DVFR</u>	1981	206,304	+10	166,686	+13	3,509	-16	29,957	(*)	6,152	+13
	1980	186,672	+3	147,062	+17	4,193	-12	29,988	+2	5,429	-3
	1979	165,482	+15	125,725	+21	4,736	+32	29,396	-1	5,625	-9
	1978	143,421	-7	103,906	-12	3,581	-15	29,767	+16	6,167	-4
	1977	155,029	**	118,712	**	4,204	**	25,714	**	6,399	**
<u>VFR</u>	1981	553,632	-2	4,622	+71	183,236	-10	338,578	+2	27,196	(*)
	1980	565,214	-9	2,703	-7	203,755	-12	331,577	-8	27,179	+12
	1979	618,887	+17	2,920	+420	230,834	+3	360,820	+28	24,313	(*)
	1978	527,463	+5	562	-61	224,516	-4	278,162	+13	24,243	+29
	1977	501,654	**	1,458	**	234,193	**	247,156	**	18,847	**

(*)Less than 0.5 percent.

NOTE: Fiscal Year 1977 and future years will be based on the new fiscal year.

CALENDAR YEARS
(TABLES 2.8 - 2.12)

TABLE 2.8—AIR TRAFFIC ACTIVITY AT AIR ROUTE TRAFFIC CONTROL CENTERS, BY AVIATION CATEGORY—CALENDAR YEARS 1977-1981

	Year	Total	Air Carrier	Air Taxi	General Aviation	Military	Annual Total change	Annual Total change	Annual Total change	Annual Total change	
		Annual Total change	Annual Total change	Annual Total change	Annual Total change	Annual Total change					
<u>IFR Aircraft Handled 1/</u>	1981	28,951,417	-3	12,825,804	-6	3,024,554	+16	8,592,448	-4	4,508,611	-5
	1980	29,307,994	-1	13,649,986	-2	2,597,415	+6	8,912,816	-1	4,747,777	-1
	1979	30,201,537	+6	13,955,015	+1	2,448,254	+24	9,013,656	+14	4,784,612	+2
	1978	28,380,569	+6	13,822,109	+4	1,967,450	+13	7,920,465	+10	4,670,545	+2
	1977	26,761,898	+10	13,253,466	+5	1,737,815	+22	7,177,060	+18	4,593,557	+11
<u>IFR Departures</u>	1981	11,258,325	-3	4,536,356	-6	1,456,678	+16	3,682,056	-5	1,589,235	-5
	1980	11,595,010	-1	4,821,900	-3	1,254,714	+7	3,857,054	-1	1,664,342	-1
	1979	11,742,106	+6	4,988,827	-2	1,177,347	+25	3,900,405	+14	1,675,527	(*)
	1978	11,120,772	+6	5,074,296	+4	939,779	+13	3,430,438	+10	1,676,259	+1
	1977	10,489,543	+10	4,888,716	+4	830,036	+23	3,110,514	+18	1,660,277	+9
<u>IFR Overs</u>	1981	6,434,767	-4	3,753,092	-6	111,198	+26	1,228,336	+2	1,342,141	-6
	1980	6,717,974	(*)	4,006,186	+1	87,987	-6	1,198,708	-1	1,425,093	-1
	1979	6,717,325	+9	3,977,361	+8	93,560	+6	1,212,846	+14	1,433,558	+9
	1978	6,139,025	+6	3,673,517	+6	87,892	+13	1,059,589	+11	1,318,037	+4
	1977	5,782,812	+11	3,476,034	+8	77,743	+16	956,032	+19	1,273,003	+17

1/The number of IFR Departures multiplied by two to account for IFR approaches, plus the number of IFR Overs.

(*)Less than 0.5 percent.

TABLE 2.9—AIR TRAFFIC ACTIVITY AT AIRPORT TRAFFIC CONTROL TOWERS, BY AVIATION CATEGORY—CALENDAR YEARS 1977–1981

	Year	Total	Air Carrier	Air Taxi	General Aviation	Military	
		Total	Annual change	Total	Annual change	Total	Annual change
<u>Total Aircraft</u>	1981	58,721,222	-9	9,339,067	-6	4,909,190	+6
<u>Operations</u>	1980	64,796,561	-6	9,956,045	-4	4,629,143	-3
	1979	69,073,449	+1	10,325,629	+1	4,490,201	+16
	1978	68,293,868	+2	10,209,356	+3	3,883,099	+14
	1977	66,801,390	+4	9,882,018	+3	3,418,582	+15
<u>Itinerant</u>	1981	40,356,183	-8	9,339,067	-6	4,909,190	+6
<u>Operations</u>	1980	43,634,248	-4	9,956,045	-4	4,629,143	-3
	1979	45,569,807	+3	10,325,629	+1	4,490,201	+16
	1978	44,346,471	+4	10,209,356	+3	3,883,099	+14
	1977	42,605,943	+5	9,882,018	+3	3,418,582	+15
<u>Local</u>	1981	18,365,039	-13	0	0	0	17,085,098
<u>Operations</u>	1980	21,162,313	-10	0	0	0	19,885,749
	1979	23,503,642	-2	0	0	0	22,187,812
	1978	23,947,397	-2	0	0	0	22,630,403
	1977	24,195,447	+4	0	0	0	22,775,139
							+4

(*) Less than 0.5 percent.

TABLE 2.10—AIR TRAFFIC ACTIVITY AT FAA FACILITIES, BY AVIATION CATEGORY—CALENDAR YEARS 1977-1981

		Total	Air Carrier	Air Taxi	General Aviation	Military					
	Year	Total	Annual change	Total	Annual change	Total	Annual change	Total	Annual change		
<u>Total Instrument Operations</u>	1981	35,282,029	-8	9,910,629	-6	4,584,384	+7	17,038,384	-13	3,748,632	-8
	1980	38,385,627	-4	10,542,195	-1	4,270,184	+11	19,482,789	+6	4,090,459	+3
	1979	36,932,918	+8	10,687,602	+1	3,841,676	+22	18,415,333	+10	3,988,307	+8
	1978	34,209,447	+6	10,583,502	+4	3,149,110	+16	16,780,693	+8	3,696,142	-1
	1977	32,162,269	+10	10,196,771	+4	2,713,805	+20	15,510,259	+13	3,741,434	+3
<u>Total Instrument Approaches 1/</u>	1981	1,996,696	-5	630,949	-9	403,915	+17	853,980	-11	107,852	+6
	1980	2,096,485	-13	694,469	-23	345,554	+9	955,176	-11	101,286	-22
	1979	2,420,987	+12	899,506	+8	316,334	+15	1,075,005	+13	130,142	+25
	1978	2,163,359	+10	829,435	+10	276,132	+18	954,014	+8	103,778	+2
	1977	1,973,033	+20	752,396	+18	232,744	+35	885,811	+22	102,082	-2
<u>Total Instrument Approaches at Control Facilities</u>	1981	1,904,650	-2	617,776	-8	385,269	+21	798,700	-8	102,905	+28
	1980	1,949,077	-14	669,548	-23	318,814	+11	866,326	-11	94,389	-24
	1979	2,253,875	+13	871,388	+9	287,429	+14	971,113	+14	123,945	+27
	1978	1,998,170	+11	797,630	+11	250,985	+19	852,371	+10	97,184	+2
	1977	1,801,222	+20	720,608	+18	210,027	+36	774,937	+21	95,650	-3

1/Includes instrument approaches at Air Route Traffic Control Centers.

(*)Less than 0.5 percent.

TABLE 2.11—AIR TRAFFIC ACTIVITY AT FLIGHT SERVICE FACILITIES—CALENDAR YEARS 1977-1981

	Year	FLIGHT PLANS ORIGINATED			AIRPORT ADVISORIES			PILOT BRIEFS	
		Total	Annual change	IFR-DVFR	VFR	Annual change	Total	Annual change	Total
<u>Flight Service Stations</u>									
1981	8,750,719	-2	6,485,570	-1	2,265,149	-4	3,329,772	-17	17,959,198
1980	8,932,399	-5	6,565,094	-4	2,367,305	-7	4,003,016	+25	17,910,285
1979	9,405,663	+4	6,864,568	+6	2,541,095	-5	3,200,780	-3	18,935,293
1978	9,125,016	+8	6,453,679	+6	2,671,337	-2	3,297,082	+8	18,250,877
1977	8,793,209	+3	6,058,984	+12	2,734,225	+1	3,051,633	+3	17,387,678
<u>Combined Station/Towers</u>									
1981	4,195	-37	1,574	-45	2,621	-33	0	0	4,855
1980	6,673	-76	2,854	-46	3,891	-85	0	0	7,504
1979	30,925	-31	5,248	-30	25,677	-32	0	0	20,028
1978	45,094	-20	7,504	-33	37,590	-17	0	0	26,427
1977	56,369	-39	11,155	-64	45,214	-27	0	0	34,149
<u>International</u>									
1981	482,057	-9	199,840	-12	282,217	-6	15,369	+435	489,851
1980	527,660	-6	226,553	-5	301,107	+8	2,875	-14	508,608
1979	495,870	+4	216,278	+8	279,592	+1	3,335	+82	518,653
1978	478,495	+10	201,003	+8	277,492	+12	1,829	+10	516,546
1977	434,742	+14	186,187	+23	248,555	+9	1,657	+25	405,304

(*)Less than 0.5 percent.

TABLE 2.12--AIR TRAFFIC ACTIVITY AT FLIGHT SERVICE FACILITIES—CALENDAR YEARS 1977-1981

	Year	Total	Air Carrier	Air Taxi	General Aviation	Military
		Annual change	Annual change	Annual change	Annual change	Annual change
Flight Service Stations						
1981	9,844,623	+4	410,486	+8	981,243	+12
1980	9,473,760	-6	379,157	-8	872,495	+2
1979	10,113,557	-1	414,191	+1	855,003	+2
1978	10,226,383	+2	408,740	+11	838,524	+7
1977	10,038,220	+4	369,075	+2	780,697	+7
IFR-DVFR						
1981	2,183,507	+13	320,595	+6	328,616	+29
1980	1,938,540	-6	301,898	-9	255,192	-1
1979	2,060,752	+8	332,887	+2	258,031	+18
1978	1,905,207	+9	324,932	+13	217,988	+15
1977	1,747,701	+17	288,303	+2	188,880	+22
VFR						
1981	7,661,116	+2	89,891	+16	652,627	+6
1980	7,534,090	-6	77,243	-5	617,189	+3
1979	8,052,805	-3	81,304	-3	596,972	-4
1978	8,321,176	(*)	83,808	+4	620,626	+5
1977	8,290,519	+1	80,772	+4	591,817	+3

(*) Less than 0.5 percent.

TABLE 2.12--AIRCRAFT CONTACTED AT FLIGHT SERVICE FACILITIES, BY AVIATION CATEGORY--CALENDAR YEARS 1977-1981 - Continued

	Year	Total	Annual change	Air Carrier	Total	Annual change	Air Taxi	Total	Annual change	General Aviation	Total	Annual change	Military	Total	Annual change
		Total	Annual change	Total	Annual change	Total	Annual change	Total	Annual change	Total	Annual change	Total	Annual change	Total	Annual change
<u>Combined Station/ Tower</u>	1981	7,143	-23	26	-84	3,570	-13	2,974	-41	573	-43				
	1980	9,239	-85	165	-64	4,117	-87	5,074	-79	1,013	-81				
	1979	61,358	-34	456	-31	31,894	-42	23,791	-21	5,217	-29				
	1978	92,673	-34	661	-79	54,640	-14	29,980	-53	7,392	-29				
	1977	140,948	-35	3,131	-46	63,865	+2	63,534	-53	10,418	-20				
<u>IFR-DVFR</u>	1981	455	-56	24	-85	19	-73	356	-47	56	-59				
	1980	1,036	-67	159	-64	71	-93	669	+36	137	-79				
	1979	3,107	-24	443	-28	974	-39	1,046	+8	644	-31				
	1978	4,114	-56	612	-68	1,602	-33	970	-69	930	-52				
	1977	9,357	-55	1,928	-64	2,377	-42	3,120	-60	1,932	-47				
<u>VFR</u>	1981	6,688	-28	2	-67	3,551	-12	2,618	-41	517	-41				
	1980	9,333	-84	6	-54	4,046	-87	4,405	-81	876	-81				
	1979	58,251	-33	13	-74	31,920	-40	22,745	-22	4,573	-29				
	1978	88,559	-33	49	-96	53,038	-14	29,010	-52	6,462	-24				
	1977	131,591	-33	1,203	+116	61,488	+5	60,414	-52	8,486	-10				

(*) Less than 0.5 percent.

TABLE 2.12—AIRCRAFT CONTACTED AT FLIGHT SERVICE FACILITIES, BY AVIATION CATEGORY—CALENDAR YEARS 1977-1981 - Continued

	Year	Total	Air Carrier	Air Taxi	General Aviation	Military	Annual change
	Year	Total	Annual change	Total	Annual change	Total	Annual change
<u>International</u>	1981	758,607	(*)	175,708	*12	175,717	-18
<u>Flight Service</u>	1980	761,023	+2	156,934	+21	214,371	-2
<u>Stations</u>	1979	747,801	+7	130,217	+28	218,115	-13
	1978	696,519	+4	101,623	-14	251,860	+6
	1977	668,150	+50	118,124	+17	236,597	+90
<u>IFR-DVFR</u>	1981	207,676	+7	168,127	+9	3,318	-21
	1980	193,603	+17	154,274	+21	4,194	-7
	1979	165,805	+20	127,127	+26	4,520	+23
	1978	138,053	-12	101,061	-14	3,667	-15
	1977	156,488	+27	117,147	+18	4,308	+28
<u>VFR</u>	1981	550,931	-3	7,581	+185	172,399	-18
	1980	567,420	-3	2,660	-14	210,177	-2
	1979	581,996	+4	3,090	+450	213,595	-14
	1978	558,466	+9	562	-43	248,193	+7
	1977	511,662	+59	977	-37	232,289	+92

(*)Less than 0.5 percent.

III. AIRPORTS

Information about U.S. civil and joint-use landing facilities (including airports, heliports, stolports, and seaplane bases) were furnished by the FAA Office of Airport Standards. This information was obtained through physical inspection and mail solicitations, and was reported on the Airport Master Record (Form FAA 5010-1) and FAA Landing Facilities Information Request on Airports, Heliports, Stolports, and Seaplane Bases (Forms 5010-2 and 5010-5).

TABLE 3.1
AIRPORTS ON RECORD WITH FAA: 1972 THROUGH 1981*

Year	Total	With Runway Lights	With Paved Runways	Airports of Entry
1972	12,405	3,827	4,390	63
1973	12,700	3,880	4,527	60
1974	13,062	3,999	4,716	61
1975	13,251	4,171	4,865	62
1976	13,770	4,362	5,106	76
1977	14,117	4,483	5,313	70
1978	14,574	4,567	5,484	70
1979	14,746	4,631	5,618	60
1980	15,161	4,738	5,833	69(r)
1981	15,476	4,796	5,002	69

*Excludes landing rights airports.
(r) Revised.

TABLE 3.2

U.S. CIVIL AND JOINT-USE AIRPORTS, HELIPORTS, STOLPORTS, AND SEAPLANE BASES,
AND REPORTED ABANDONMENTS ON RECORD, BY FAA REGION AND STATE: DECEMBER 31, 1981

FAA REGION AND STATE	TOTAL AIRCRAFT FACILITIES	AIRPORTS	HELIPORTS	STOLPORTS	SEAPLANE BASES	REPORTED ABANDONMENTS DURING YEAR
TOTAL	15,476	12,427	2,507	57	485	277
UNITED STATES--TOTAL*	15,422	12,393	2,491	57	481	376
ALASKAN--TOTAL	689	509	25	---	155	14
CENTRAL--TOTAL	1,373	1,267	94	3	9	32
IOWA	270	244	25	1	---	9
KANSAS	376	356	15	1	4	11
MISSOURI	393	344	43	1	5	8
NEBRASKA	334	323	11	---	---	4
EASTERN--TOTAL	2,003	1,375	548	9	71	56
DELAWARE	37	23	14	---	---	1
DISTRICT OF COLUMBIA	16	2	14	---	---	1
MARYLAND	145	105	35	4	1	8
NEW JERSEY	271	120	139	---	12	5
NEW YORK	486	362	95	1	28	13
PENNSYLVANIA	698	496	185	2	15	17
VIRGINIA	260	207	46	2	5	8
WEST VIRGINIA	90	60	20	---	10	3
GREAT LAKES--TOTAL	3,813	3,287	413	9	104	94
ILLINOIS	929	763	156	---	10	30
INDIANA	365	320	40	1	4	8
MICHIGAN	417	381	29	2	5	16
MINNESOTA	493	408	18	1	66	10
NORTH DAKOTA	365	362	3	---	---	3
OHIO	674	518	147	3	6	17
SOUTH DAKOTA	162	157	4	1	---	1
WISCONSIN	408	378	16	1	13	9
NEW ENGLAND--TOTAL	534	345	123	6	60	12
CONNECTICUT	105	54	43	2	6	1
MAINE	158	112	7	1	38	3
MASSACHUSETTS	136	78	48	1	9	5
NEW HAMPSHIRE	52	41	7	---	4	1
RHODE ISLAND	18	12	4	---	2	---
VERMONT	65	48	14	2	1	2

TABLE 3-2 (CONTINUED)

U.S. CIVIL AND JOINT-USE AIRPORTS, HELIPORTS, STOLPORTS, AND SEAPLANE BASES,
AND REPORTED ABANDONMENTS ON RECORD, BY FAA REGION AND STATE: DECEMBER 31, 1981

FAA REGION AND STATE	TOTAL AIRCRAFT FACILITIES	AIRPORTS	HELIPORTS	STOLPORTS	SEAPLANE BASES	REPORTED ABANDONMENTS DURING YEAR
NORTHWEST MOUNTAIN--TOTAL	<u>1,586</u>	<u>1,284</u>	<u>272</u>	<u>10</u>	<u>20</u>	<u>44</u>
COLORADO	312	218	86	4	4	12
IDAHO	196	178	15	---	3	5
MONTANA	190	179	11	---	---	---
OREGON	318	252	59	4	3	7
UTAH	102	85	15	1	1	2
WASHINGTON	363	279	74	1	9	15
WYOMING	105	93	12	---	---	3
SOUTHERN--TOTAL	<u>1,895</u>	<u>1,536</u>	<u>327</u>	<u>9</u>	<u>23</u>	<u>38</u>
ALABAMA	165	137	28	---	---	4
FLORIDA	506	369	120	1	16	8
GEORGIA	293	245	44	3	1	5
KENTUCKY	125	103	22	---	---	5
MISSISSIPPI	180	165	15	---	---	1
NORTH CAROLINA	286	244	40	1	1	9
PUERTO RICO	33	17	15	---	1	---
SOUTH CAROLINA	137	127	10	---	---	2
TENNESSEE	164	127	32	4	1	3
VIRGIN ISLANDS	6	2	1	---	3	1
SOUTHWEST--TOTAL	<u>2,333</u>	<u>1,930</u>	<u>374</u>	<u>4</u>	<u>25</u>	<u>64</u>
ARKANSAS	157	153	3	---	1	3
LOUISIANA	292	175	99	---	18	7
NEW MEXICO	156	143	12	---	1	6
OKLAHOMA	297	275	21	---	1	6
TEXAS	1,431	1,184	239	4	4	42
WESTERN-PACIFIC--TOTAL	<u>1,250</u>	<u>894</u>	<u>331</u>	<u>7</u>	<u>18</u>	<u>23</u>
ARIZONA	224	174	47	3	---	7
CALIFORNIA	832	566	246	3	17	11
HAWAII	51	37	14	---	---	4
NEVADA	128	102	24	1	1	1
SOUTH PACIFIC**	15	15	---	---	---	---

* EXCLUDES PUERTO RICO, VIRGIN ISLANDS, N. MARIANA ISLANDS, AND SOUTH PACIFIC.

** AMERICAN SAMOA, GUAM AND TRUST TERRITORIES.

TABLE 3.3

U.S. CIVIL AND JOINT-USE AIRPORTS, HELIPORTS, STOLPORTS, AND SEAPLANE BASES
ON RECORD BY TYPE OF OWNERSHIP
DECEMBER 31, 1981

FAA REGION AND STATE	TOTAL FACILITIES	By Ownership		PAVED AIRPORTS		UNPAVED AIRPORTS	
		PUBLIC	PRIVATE	LIGHTED	NOT LIGHTED	LIGHTED	NOT LIGHTED
TOTAL	15,476	4,798	10,678	3,836	2,176	960	8,514
UNITED STATES--TOTAL*	15,422	4,768	10,654	3,818	2,153	960	8,502
ALASKAN--TOTAL	689	477	212	42	15	62	570
CENTRAL--TOTAL	1,373	458	915	390	83	141	759
IOWA	270	117	153	98	15	57	100
KANSAS	376	129	247	102	13	38	223
MISSOURI	393	118	275	116	39	27	211
NEBRASKA	334	94	240	74	16	19	225
EASTERN--TOTAL	2,003	315	1,688	414	343	129	1,122
DELAWARE	37	3	34	6	6	9	16
DISTRICT OF COLUMBIA	16	7	9	5	8	---	3
MARYLAND	145	24	121	38	24	10	73
NEW JERSEY	271	35	236	47	57	15	152
NEW YORK	486	83	403	102	89	38	267
PENNSYLVANIA	698	77	621	113	107	43	435
VIRGINIA	260	58	202	73	32	11	144
WEST VIRGINIA	90	28	62	30	20	3	37
GREAT LAKES--TOTAL	3,813	860	2,953	754	258	334	2,462
ILLINOIS	929	98	843	110	65	64	690
INDIANA	365	78	287	86	26	37	216
MICHIGAN	417	133	284	122	32	44	219
MINNESOTA	493	145	348	98	9	43	343
NORTH DAKOTA	365	97	268	58	7	29	271
OHIO	674	133	541	141	89	56	388
SOUTH DAKOTA	162	74	88	42	5	29	86
WISCONSIN	408	102	306	97	25	32	254
NEW ENGLAND--TOTAL	534	138	396	129	108	9	288
CONNECTICUT	105	15	90	27	31	1	46
MAINE	158	45	113	28	13	3	114
MASSACHUSETTS	136	35	101	41	42	3	50
NEW HAMPSHIRE	52	15	37	17	12	2	21
RHODE ISLAND	18	8	10	7	3	---	8
VERMONT	65	20	45	9	7	---	49

TABLE 3.3 (CONTINUED)

U.S. CIVIL AND JOINT-USE AIRPORTS, HELIPORTS, STOLPORTS, AND SEAPLANE BASES
ON RECORD BY TYPE OF OWNERSHIP
DECEMBER 31, 1981

FAA REGION AND STATE	TOTAL FACILITIES	BY OWNERSHIP		PAVED AIRPORTS		UNPAVED AIRPORTS	
		PUBLIC	PRIVATE	LIGHTED	NOT LIGHTED	LIGHTED	NOT LIGHTED
NORTHWEST MOUNTAIN--TOTAL	<u>1,586</u>	<u>649</u>	<u>937</u>	<u>410</u>	<u>257</u>	<u>92</u>	<u>827</u>
COLORADO	312	90	222	74	60	19	159
IDAHO	196	126	70	40	18	3	135
MONTANA	190	118	72	66	14	16	94
OREGON	318	96	222	66	56	18	178
UTAH	102	57	45	42	20	---	40
WASHINGTON	363	118	245	93	72	33	165
WYOMING	105	44	61	29	17	3	56
SOUTHERN--TOTAL	<u>1,895</u>	<u>748</u>	<u>1,147</u>	<u>676</u>	<u>281</u>	<u>95</u>	<u>843</u>
ALABAMA	165	97	68	92	30	4	39
FLORIDA	506	132	374	124	79	27	276
GEORGIA	293	125	168	111	38	11	133
KENTUCKY	125	62	63	51	28	7	39
MISSISSIPPI	180	82	98	69	24	9	78
NORTH CAROLINA	286	90	196	88	28	19	151
PUERTO RICO	33	13	20	11	17	---	5
SOUTH CAROLINA	137	66	71	53	12	12	60
TENNESSEE	164	77	87	75	25	6	58
VIRGIN ISLANDS	6	4	2	2	---	---	4
SOUTHWEST--TOTAL	<u>2,333</u>	<u>669</u>	<u>1,664</u>	<u>656</u>	<u>443</u>	<u>73</u>	<u>1,161</u>
ARKANSAS	157	81	76	69	20	7	61
LOUISIANA	292	74	218	72	65	5	150
NEW MEXICO	156	66	90	46	24	2	84
OKLAHOMA	297	126	171	116	37	12	132
TEXAS	1,431	322	1,109	297	297	47	734
WESTERN--TOTAL	<u>1,250</u>	<u>484</u>	<u>766</u>	<u>365</u>	<u>388</u>	<u>25</u>	<u>472</u>
ARIZONA	224	96	128	65	43	7	109
CALIFORNIA	832	295	537	261	286	14	271
HAWAII	51	18	33	11	25	1	14
NEVADA	128	62	66	23	28	3	74
SOUTH PACIFIC**	15	13	2	5	6	---	4

*EXCLUDES PUERTO RICO, VIRGIN ISLANDS, N. MARIANA ISLANDS, AND SOUTH PACIFIC.

**AMERICAN SAMOA, GUAM AND TRUST TERRITORIES.

TABLE 3.4

U.S. CIVIL AND JOINT-USE AIRPORTS, HELIPORTS, STOLPORTS, AND SEAPLANE BASES
ON RECORD BY LENGTH OF LONGEST RUNWAY, BY FAA REGION AND STATE: DECEMBER 31, 1981

FAA REGION AND STATE	TOTAL	UNDER 3,000	3,000- 3,999	4,000- 4,999	5,000- 5,999	6,000- 6,999	7,000- 7,999	8,000- 8,999	9,000- 9,999	10,000- & OVER
TOTAL	15,476	10,027	2,598	1,106	811	324	173	113	63	261
UNITED STATES--TOTAL*	15,422	9,997	2,594	1,103	806	321	170	112	61	258
ALASKAN--TOTAL	689	360	71	61	72	23	13	11	3	75
CENTRAL--TOTAL	1,373	974	255	64	34	16	12	2	2	9
IOWA	270	189	52	16	4	5	1	2	1	---
KANSAS	376	263	72	16	14	---	7	1	---	3
MISSOURI	393	288	68	12	10	7	2	1	---	5
NEBRASKA	334	234	63	20	6	4	2	3	1	1
EASTERN--TOTAL	2,003	1,594	177	72	75	26	15	9	8	22
DELAWARE	37	30	3	2	1	---	1	---	---	---
DISTRICT OF COLUMBIA	16	14	---	---	---	1	---	---	---	1
MARYLAND	145	120	14	6	3	---	---	1	1	0
NEW JERSEY	271	229	20	4	9	1	3	1	1	3
NEW YORK	486	362	46	21	18	9	4	3	4	19
PENNSYLVANIA	698	599	47	18	17	7	3	1	2	4
VIRGINIA	260	187	35	17	12	5	1	3	---	---
WEST VIRGINIA	90	53	12	4	15	3	3	---	---	---
GREAT LAKES--TOTAL	3,813	2,863	529	155	105	59	26	24	9	43
ILLINOIS	929	817	65	16	12	9	3	3	---	4
INDIANA	365	270	54	14	13	4	2	1	1	5
MICHIGAN	417	279	78	16	21	10	6	1	2	5
MINNESOTA	493	309	84	23	27	16	5	6	---	23
NORTH DAKOTA	365	280	61	14	4	2	2	1	1	---
OHIO	674	521	83	38	17	7	1	3	3	1
SOUTH DAKOTA	162	94	43	15	2	5	2	1	---	---
WISCONSIN	408	293	61	19	9	6	5	8	2	5
NEW ENGLAND--TOTAL	534	367	52	29	41	13	2	3	2	20
CONNECTICUT	105	87	4	6	5	---	1	---	1	1
MAINE	158	85	18	14	13	7	3	1	---	17
MASSACHUSETTS	136	96	16	5	12	3	1	1	1	1
NEW HAMPSHIRE	52	33	8	---	7	2	1	---	---	1
RODE ISLAND	18	12	1	2	1	1	---	1	---	---
VERMONT	65	54	5	2	3	---	1	---	---	---

TABLE 3.4 (CONTINUED)

U.S. CIVIL AND JOINT-USE AIRPORTS, HELIPORTS, STOLPORTS, AND SEAPLANE BASES
ON RECORD BY LENGTH OF LONGEST RUNWAY, BY FAA REGION AND STATE: DECEMBER 31, 1981

FAA REGION AND STATE	TOTAL	UNDER 3,000	3,000- 3,999	4,000- 4,999	5,000- 5,999	6,000- 6,999	7,000- 7,999	8,000- 8,999	9,000- 9,999	10,000- & OVER
NORTHWEST MOUNTAIN--TOTAL	<u>1,586</u>	<u>875</u>	<u>291</u>	<u>185</u>	<u>120</u>	<u>44</u>	<u>25</u>	<u>11</u>	<u>12</u>	<u>23</u>
COLORADO	312	152	55	48	28	11	7	6	1	4
IDAHO	196	101	44	30	13	2	1	---	3	2
MONTANA	190	71	70	26	12	2	---	2	4	3
OREGON	318	232	37	21	15	7	2	1	---	3
UTAH	102	19	22	24	20	9	5	---	1	2
WASHINGTON	363	269	44	13	20	4	4	---	2	7
WYOMING	105	31	19	23	12	9	6	2	1	2
SOUTHERN--TOTAL	<u>1,895</u>	<u>1,031</u>	<u>447</u>	<u>179</u>	<u>124</u>	<u>43</u>	<u>24</u>	<u>21</u>	<u>10</u>	<u>16</u>
ALABAMA	165	71	43	26	11	5	1	5	2	1
FLORIDA	506	300	90	43	32	16	8	6	1	10
GEORGIA	293	159	77	22	25	4	1	3	1	1
KENTUCKY	125	79	19	12	8	5	1	---	1	---
MISSISSIPPI	180	75	72	16	8	3	2	3	1	---
NORTH CAROLINA	286	172	65	28	8	5	5	2	---	1
PUERTO RICO	33	24	3	1	3	---	--	--	--	2
SOUTH CAROLINA	137	66	42	7	15	2	2	1	2	---
TENNESSEE	164	83	36	23	14	3	2	1	2	---
VIRGIN ISLANDS	6	2	---	1	---	---	2	---	---	1
SOUTHWEST--TOTAL	<u>2,333</u>	<u>1,245</u>	<u>565</u>	<u>236</u>	<u>156</u>	<u>51</u>	<u>32</u>	<u>14</u>	<u>8</u>	<u>26</u>
ARKANSAS	157	71	48	15	13	8	1	1	---	---
LOUISIANA	292	176	65	16	14	5	2	2	1	11
NEW MEXICO	156	36	24	30	37	11	11	3	---	4
OKLAHOMA	297	165	84	19	17	4	3	1	2	2
TEXAS	1,431	797	344	156	75	23	15	7	5	9
WESTERN-PACIFIC--TOTAL	<u>1,250</u>	<u>718</u>	<u>211</u>	<u>125</u>	<u>84</u>	<u>49</u>	<u>19</u>	<u>13</u>	<u>9</u>	<u>22</u>
ARIZONA	224	94	44	45	20	10	5	3	---	3
CALIFORNIA	832	337	144	54	40	24	7	6	4	16
HAWAII	51	39	3	2	2	2	1	---	1	1
NEVADA	128	44	19	23	20	10	5	3	2	2
SOUTH PACIFIC**	15	4	1	1	2	3	1	1	2	---

*EXCLUDES PUERTO RICO, VIRGIN ISLANDS, N. MARIANA ISLANDS, AND SOUTH PACIFIC.

**AMERICAN SAMOA, GUAM AND TRUST TERRITORIES.

TABLE 3.5

U.S. CIVIL AND JOINT-USE AIRPORTS, HELIPORTS, STOLPORTS, AND SEAPLANE BASES ON RECORD
BY FAA REGION AND STATE AND OTHER AREAS: DECEMBER 31, 1972 THROUGH 1981

FAA REGION AND STATE	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981
TOTAL	12,405	12,700	13,062	13,251	13,770	14,117	14,574	14,746	15,161	15,476
UNITED STATES--TOTAL*	12,362	12,656	13,019	13,207	13,728	14,069	14,525	14,693	15,107	15,422
ALASKAN--TOTAL	766	766	766	769	762	763	756	734	731	689
CENTRAL--TOTAL	1,159	1,197	1,205	1,198	1,243	1,274	1,322	1,325	1,340	1,373
IOWA	244	246	248	241	250	253	257	258	267	270
KANSAS	307	315	314	318	334	351	372	374	377	376
MISSOURI	319	341	346	343	358	365	371	374	377	393
NEBRASKA	289	295	297	296	301	305	322	319	319	334
EASTERN--TOTAL	1,543	1,631	1,729	1,776	1,860	1,906	1,976	1,961	1,971	2,003
DELAWARE	30	30	32	32	32	32	32	35	36	37
DISTRICT OF COLUMBIA	7	9	14	16	16	17	17	18	18	16
MARYLAND	99	107	123	128	135	142	148	144	150	145
NEW JERSEY	192	207	222	222	239	254	263	266	265	271
NEW YORK	442	465	478	488	496	490	498	482	471	486
PENNSYLVANIA	514	541	579	609	644	651	692	684	694	698
VIRGINIA	209	220	227	230	240	249	255	256	260	260
WEST VIRGINIA	50	52	54	51	58	71	71	76	77	90
GREAT LAKES--TOTAL	2,726	2,799	2,914	2,940	3,095	3,177	3,370	3,439	3,641	3,813
ILLINOIS	749	773	829	831	867	876	901	891	942	929
INDIANA	20 ⁹	220	232	237	293	306	317	325	347	365
MICHIGAN	383	401	403	400	421	413	418	413	419	417
MINNESOTA	276	279	295	301	312	336	420	468	491	493
NORTH DAKOTA	193	194	196	198	209	211	217	221	229	365
OHIO	522	536	543	548	558	569	584	586	652	674
SOUTH DAKOTA	114	115	124	125	131	134	142	153	159	162
WISCONSIN	281	281	292	303	321	332	371	382	402	408
NEW ENGLAND--TOTAL	457	481	512	529	547	542	540	536	542	534
CONNECTICUT	79	83	91	91	104	103	104	106	108	105
MAINE	153	155	158	161	162	162	157	160	162	158
MASSACHUSETTS	117	125	131	139	141	139	140	137	138	136
NEW HAMPSHIRE	46	50	56	58	57	54	55	52	52	52
RHODE ISLAND	15	17	17	18	22	24	23	20	18	18
VERMONT	47	51	59	62	61	60	61	61	64	65

TABLE 3.5 (CONTINUED)

U.S. CIVIL AND JOINT-USE AIRPORTS, HELIPORTS, STOLPORTS, AND SEAPLANE BASES ON RECORD
BY FAA REGION AND STATE AND OTHER AREAS: DECEMBER 31, 1972 THROUGH 1981

FAA REGION AND STATE	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981
NORTHWEST MOUNTAIN--TOTAL	1,247	1,275	1,318	1,340	1,414	1,457	1,490	1,542	1,593	1,586
COLORADO	214	220	228	230	255	261	272	301	307	312
IDAHO	169	170	174	181	187	190	190	194	197	190
MONTANA	176	167	168	167	172	169	172	177	185	190
OREGON	258	264	273	277	286	301	302	308	323	318
UTAH	87	92	93	90	90	93	95	100	104	102
WASHINGTON	258	278	296	307	334	350	365	365	371	363
WYOMING	85	84	86	88	90	93	94	97	106	105
SOUTHERN--TOTAL	1,397	1,409	1,436	1,474	1,555	1,666	1,719	1,765	1,851	1,895
ALABAMA	128	127	126	129	131	142	147	156	163	165
FLORIDA	329	332	341	355	391	438	454	458	485	506
GEORGIA	231	232	236	248	262	275	278	283	288	293
KENTUCKY	76	80	81	87	90	97	101	112	128	125
MISSISSIPPI	134	138	141	145	148	154	160	165	171	180
NORTH CAROLINA	228	227	236	237	251	258	270	271	285	286
PUERTO RICO	27	27	26	25	23	27	27	32	32	33
SOUTH CAROLINA	120	120	117	116	123	126	126	127	132	137
TENNESSEE	120	122	128	128	132	144	150	155	160	164
VIRGIN ISLANDS	4	4	4	4	4	4	5	6	7	6
SOUTHWEST--TOTAL	1,968	2,020	2,046	2,070	2,087	2,123	2,227	2,227	2,263	2,333
ARKANSAS	155	161	161	165	166	167	167	167	156	157
LOUISIANA	260	278	286	281	280	282	291	291	289	292
NEW MEXICO	131	134	134	134	139	139	145	145	149	156
OKLAHOMA	273	278	273	277	285	285	292	292	294	297
TEXAS	1,672	1,169	1,192	1,213	1,217	1,250	1,332	1,332	1,375	1,431
WESTERN-PACIFIC--TOTAL	1,124	1,122	1,136	1,152	1,190	1,209	1,220	1,217	1,229	1,250
ARIZONA	198	196	196	196	202	209	210	210	216	224
CALIFORNIA	754	753	769	781	804	813	819	819	825	832
HAWAII	48	46	47	47	53	56	54	54	50	51
NEVADA	112	114	111	113	118	118	119	119	123	128
SOUTH PACIFIC**	12	13	13	15	15	16	12	11	15	15

*EXCLUDES PUERTO RICO, VIRGIN ISLANDS, N. MARIANA ISLANDS, AND SOUTH PACIFIC.

**AMERICAN SAMOA, GUAM AND TRUST TERRITORIES.

TABLE 3-6
AIRPORT DEVELOPMENT AND PROGRAM STATUS AS OF DECEMBER 31, 1981

FAA REGION AND STATE	AIR CARRIER			GENERAL AVIATION		
	TOTAL FEDERAL FUNDS (000)	TOTAL AIRPORTS	TOTAL PROJECTS	TOTAL FEDERAL FUNDS (000)	TOTAL AIRPORTS	TOTAL PROJECTS
TOTAL	\$3,800,634	723	4,447	\$634,461	1,272	2,300
UNITED STATES--TOTAL*	3,741,161	712	4,388	633,094	1,270	2,296
ALASKAN--TOTAL	187,696	72	149	27,952	14	33
CENTRAL--TOTAL	201,030	53	308	49,490	121	168
IOWA	38,041	13	70	7,260	24	34
KANSAS	40,783	16	73	11,695	28	38
MISSOURI	77,292	10	72	21,168	37	51
NEBRASKA	44,914	14	93	9,367	32	45
EASTERN--TOTAL	516,010	82	670	81,201	112	262
DELAWARE	4,006	1	10	953	1	4
MARYLAND	31,409	5	32	8,682	9	22
NEW JERSEY	68,913	9	71	13,421	8	28
NEW YORK	174,438	24	220	20,897	30	80
PENNSYLVANIA	142,360	22	174	19,216	31	60
VIRGINIA	57,763	12	97	11,622	23	49
WEST VIRGINIA	37,121	9	66	6,410	10	24
GREAT LAKES--TOTAL	539,940	122	700	131,423	222	365
ILLINOIS	152,380	25	132	20,719	39	77
INDIANA	65,173	13	69	40,376	29	54
MICHIGAN	124,308	24	138	17,720	32	47
MINNESOTA	50,143	16	78	13,335	35	37
NORTH DAKOTA	29,138	7	51	6,315	20	26
OHIO	81,736	14	67	16,797	23	55
SOUTH DAKOTA	29,771	9	80	5,975	18	23
WISCONSIN	66,200	14	85	10,186	31	46
NEW ENGLAND--TOTAL	114,612	36	262	23,826	59	151
CONNECTICUT	20,419	5	38	2,766	5	15
MAINE	23,976	8	74	4,484	22	36
MASSACHUSETTS	45,147	11	82	11,323	19	70
NEW HAMPSHIRE	7,088	4	32	2,060	6	15
RHODE ISLAND	10,913	4	11	1,771	1	3
VERMONT	7,069	4	25	1,422	6	12

TABLE 3.6 (CONTINUED)

AIRPORT DEVELOPMENT AND PROGRAM STATUS AS OF DECEMBER 31, 1981

FAA REGION AND STATE	AIR CARRIER			GENERAL AVIATION		
	TOTAL FEDERAL FUNDS (000)	TOTAL AIRPORTS	TOTAL PROJECTS	TOTAL FEDERAL FUNDS (000)	TOTAL AIRPORTS	TOTAL PROJECTS
NORTHWEST MOUNTAIN--TOTAL	<u>375,799</u>	<u>85</u>	<u>505</u>	<u>74,076</u>	<u>152</u>	<u>274</u>
COLORADO	98,239	16	92	22,696	18	43
IDAHO	27,116	9	57	6,230	19	35
MONTANA	41,977	15	98	7,235	27	30
OREGON	59,476	11	68	10,739	27	45
UTAH	38,832	6	33	7,071	18	34
WASHINGTON	79,176	18	98	14,476	28	61
WYOMING	30,983	10	59	5,629	15	26
SOUTHERN--TOTAL	<u>733,693</u>	<u>108</u>	<u>729</u>	<u>97,369</u>	<u>249</u>	<u>427</u>
ALABAMA	47,485	11	73	11,974	22	38
FLORIDA	207,899	29	182	18,255	43	92
GEORGIA	134,061	12	76	16,387	46	63
KENTUCKY	48,695	7	68	10,757	17	33
MISSISSIPPI	36,417	12	77	9,552	42	69
NORTH CAROLINA	81,944	13	94	13,183	27	55
PUERTO RICO	19,496	3	19	1,367	2	4
SOUTH CAROLINA	34,870	8	39	7,847	24	38
TENNESSEE	74,305	11	86	8,337	26	35
VIRGIN ISLANDS	48,511	2	15	---	---	---
SOUTHWEST--TOTAL	<u>467,289</u>	<u>80</u>	<u>630</u>	<u>83,538</u>	<u>221</u>	<u>389</u>
ARKANSAS	26,857	11	82	8,338	29	51
LOUISIANA	91,639	10	107	9,541	21	34
NEW MEXICO	24,522	11	94	12,411	22	46
OKLAHOMA	68,622	13	88	10,810	52	90
TEXAS	255,649	35	259	42,438	97	168
WESTERN-PACIFIC--TOTAL	<u>605,667</u>	<u>85</u>	<u>494</u>	<u>65,314</u>	<u>117</u>	<u>226</u>
ARIZONA	77,843	14	75	13,385	23	39
CALIFORNIA	321,202	51	298	45,241	79	157
HAWAII	106,429	8	47	780	2	4
NEVADA	60,216	4	34	5,908	13	26
SOUTH PACIFIC**	39,977	8	40	---	---	---

*EXCLUDES PUERTO RICO, VIRGIN ISLANDS, N. MARIANA ISLANDS, AND SOUTH PACIFIC.

**AMERICAN SAMOA, GUAM AND TRUST TERRITORIES.

IV. AIR CARRIER PASSENGERS

AIRPORT ACTIVITY OF CERTIFIED ROUTE AIR CARRIERS
(TABLES 4.1 - 4.11)

COMMUTERS
(TABLES 4.12 - 4.15)

AIRPORT ACTIVITY OF CERTIFICATED ROUTE AIR CARRIERS

The data presented in this section of the chapter were obtained from quarterly reports submitted to the Civil Aeronautics Board (CAB) by the certificated route air carriers on Schedule T-3 (a) (b) (c), Airport Activity Statistics of CAB Form 41, Uniform System of Accounts and Reports for Certificated Air Carriers. These statistics summarize revenue; passenger enplanements; aircraft departures; and tons of freight, express, and mail enplaned at the 627 certificated points in the 50 States, the District of Columbia, and other U.S. areas designated by the Federal Aviation Administration (FAA) receiving scheduled and nonscheduled service during calendar year 1981.

Air traffic hubs are not airports; they are the cities and Standard Metropolitan Statistical Areas (SMSA) requiring aviation services. An SMSA is a county that contains at least one city of 50,000 population, or twin cities with a combined population of at least 50,000, plus any contiguous counties that are metropolitan in character and have similar economic and social relationships. These metropolitan areas constitute a primary focal point for the transportation research programs of the FAA, and the analyses of individual cities within an area are treated in relationship to the entire area. In those instances where two or more individually certificated communities are located in an SMSA, those communities are grouped under the SMSA definition throughout this publication.

Individual communities fall into four hub classifications as determined by each community's percentage of the total enplaned revenue passengers

in all services and all operations of U.S. certificated route air carriers within the 50 States, the District of Columbia, and other U.S. areas designated by the FAA. Classifications in this issue are based on 265,782,903 total enplaned revenue passengers.

The percentage and number of enplaned passengers in the hub classifications for calendar year 1981 are:

<u>Hub Classification</u>	<u>Percentage of Total Enplaned Passengers</u>	<u>Number of Enplaned Passengers</u>
Large (L)	1.00 or more	2,657,829 or more
Medium (M)	0.25 to 0.99	664,457 to 2,657,828
Small (S)	0.05 to 0.24	132,891 to 664,456
Nonhub (N)	less than 0.05	less than 132,890

For the 12-month period ending December 31, 1981, there were 153 air traffic hubs. These hubs represented 26.2 percent of the 627 certificated points in the 50 States, the District of Columbia, and other U.S. areas receiving air carrier service during the period. The dominance of the hubs in the air traffic patterns is brought out by the fact that of the 265,782,903 passenger enplanements during the period, 96.4 percent (258,083,575) were recorded at the 153 hubs, while the nonhubs accounted for only 3.7 percent (7,699,328). Of the 96.4 percent of the passenger enplanements recorded at the hubs, the 36 large hubs accounted for 70.0 percent, the 43 medium hubs accounted for 18.9 percent, and the 74 small hubs accounted for 7.5 percent.

Data for passenger enplanements include enplaned passengers in both domestic and international, and scheduled and non-scheduled service of the certificated route air carriers, for all types of aircraft for the 50 States, the District of Columbia, and other U.S. areas designated by the FAA.

1981 totals may be slightly different from those found in the 1981 CAB-FAA "Airport Activity Statistics of Certificated Route Air Carriers" publication. This does not mean that either set of totals are incorrect. The totals in this publication reflect an updated copy from CAB at the time this publication went to press.

AIR TRAFFIC HUBS

December 31, 1981

December 31, 1981

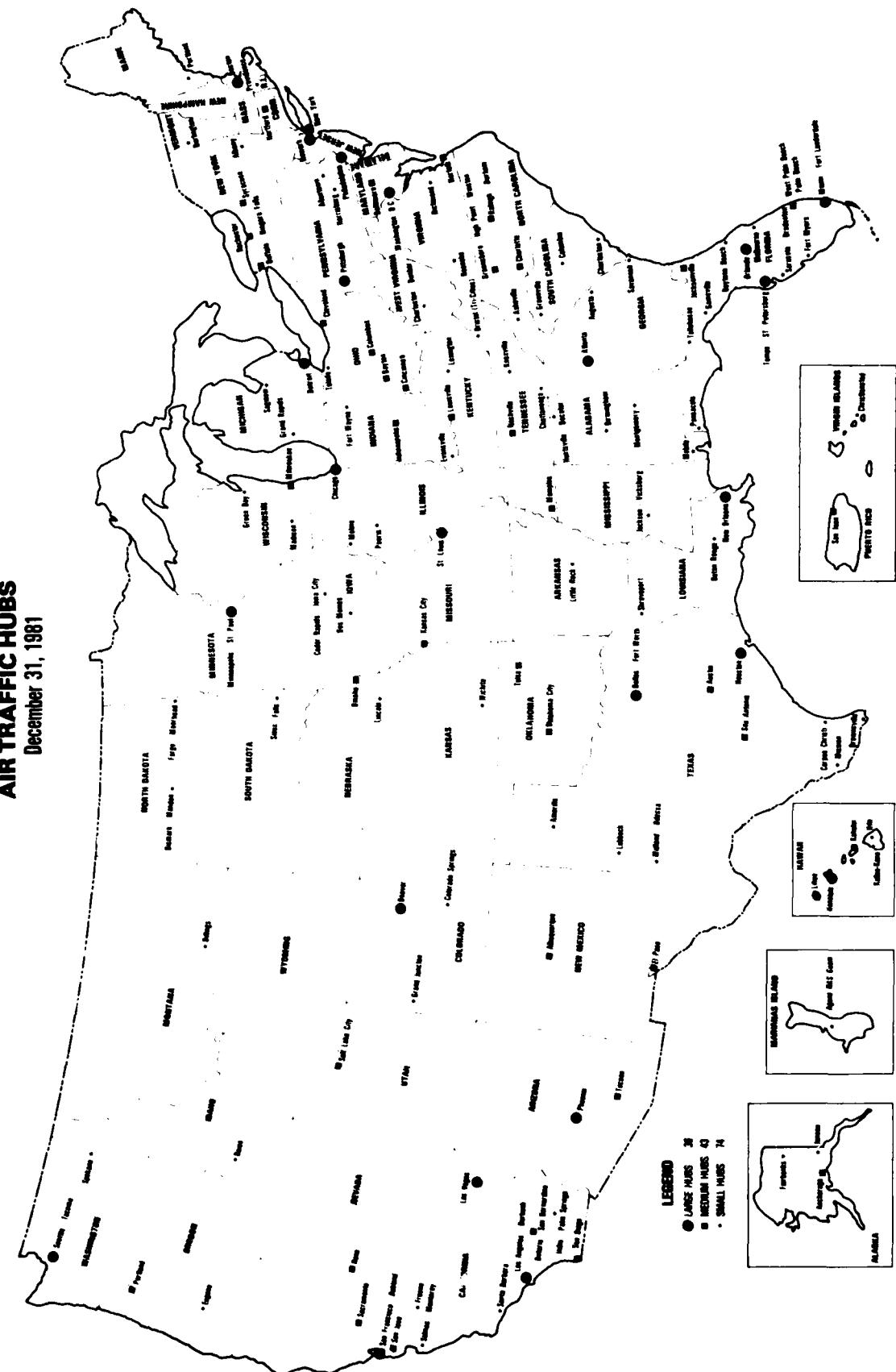


TABLE 4.1

CERTIFICATED ROUTE AIR CARRIERS
AS OF DECEMBER 31, 1981

AeroMech	Hawaiian
Aerostar	Imperial
Air California	Intercontinental
Air Florida	Kodiak
Airlift	Mackey
Air Midwest	Mid-South
Air Nevada	Midstate
Air New England	Midway
Air North	Mississippi Valley
Air North/Nenana	Munz
Air Wisconsin	Muse
Alaska	New York Air
Alaska International	NewAir
Aloha	Northwest
Altair	Ozark
American	Pacific Southwest
American Eagle	Pan American
American Trans Air	People Express
Apollo	Piedmont
Arrow	Reeve
Aspen	Republic
Big Sky	Rich
Braniff	Rocky Mountain
Britt	Rosenbalm
Capitol	Sea Airmotive
Cascade	Sky West
Challenge	Southeast
Cochise	Southern Air
Coleman	Southwest
Colgan	Sun Land
Continental	Swift Aire
Delta	T-Bird
Eastern	Texas International
Elan	Trans World
Empire	TransAmerica
Evergreen	United
Flying Tiger	USAir
Frontier	Western
Global	Western Yukon
Golden Gate	Wien
Golden West	World
Great American	Wright
Guy-America	Zantop

TABLE 4.2

AIRLINE TRAFFIC ENPLANED AT U.S. STATIONS
1972 THROUGH 1981

YEAR	ENPLANED PASSENGERS			AIR CARRIER AIRCRAFT DEPARTURES	TONS OF ENPLANED MAIL	TONS OF ENPLANED CARGO
	TOTAL	DOMESTIC	INT'L NATIONAL			
1972*	178,787,654	172,263,469	6,524,185	4,832,444	930,401.8	2,717,201.3
1973*	189,864,820	182,987,738	6,877,082	4,913,363	899,621.6	3,037,249.3
1974*	195,806,001	189,316,615	6,489,386	4,536,090	894,016.2	2,988,072.3
1975*	194,538,351	188,495,858	6,042,493	4,525,031	890,490.7	2,717,369.5
1976*	213,076,331	206,664,841	6,411,490	4,670,531	957,048.3	2,840,839.9
1977*	229,344,987	222,589,589	6,755,398	4,781,923	997,473.3	3,031,518.1
1978*	261,313,500	253,397,340	7,916,160	4,844,426	1,043,564.5	3,244,108.8
1979*	296,132,661	286,880,624	9,252,037	5,094,736	1,071,071.8	3,122,796.4
1980*	278,957,991	269,585,572	9,372,419	5,131,204	1,520,132.5	3,504,028.3
1981	263,684,851	256,007,148	7,677,703	4,940,700	1,160,808.6	2,643,964.8

* THESE DATA INCLUDE DOMESTIC ALL-CARGO FIGURES WHICH ARE SHOWN IN TABLE 4.6

NOTE: DATA INCLUDE SCHEDULED AND NONSCHEDULED OPERATIONS.

SOURCE: CAB-FAA "AIRPORT ACTIVITY STATISTICS OF CERTIFIED ROUTE AIR CARRIERS."

IMPORTANT: SEE LAST PARAGRAPH IN THE INTRODUCTION TO THIS SECTION OF THE CHAPTER REGARDING 1981 TOTALS.

TABLE 4.3
AMERICAN FLAG AIRLINE TRAFFIC ENPLANED AT TERRITORIAL U.S. STATIONS
1972 THROUGH 1981

YEAR	ENPLANED PASSENGERS			AIR CARRIER AIRCRAFT DEPARTURES	TONS OF ENPLANED MAIL	TONS OF ENPLANED CARGO
	TOTAL	DOMESTIC	INT'L NATIONAL			
1972	2,524,395	29,572	2,494,823	41,495	4,310.1	37,397.2
1973	2,622,340	40,641	2,581,699	46,080	5,108.6	40,547.9
1974	2,601,804	**182	2,601,622	35,906	5,639.3	45,922.6
1975	2,243,793	--	2,243,793	30,485	5,807.1	4,7394.0
1976	2,258,714	--	2,258,714	28,559	5,551.2	48,329.3
1977	2,358,039	--	2,358,039	27,511	6,212.7	55,971.6
1978	2,713,246	--	2,713,246	29,040	5,919.4	59,188.7
1979	2,901,802	3,240	2,898,562	31,388	5,660.7	60,788.1
1980	2,450,861	454	2,450,407	25,644	5,992.8	58,159.1
1981	2,221,106	1,807,670	413,436	21,080	6,135.3	56,561.2

** 1974 DOMESTIC TOTAL IS FOR SCHEDULED OPERATIONS ONLY.

NOTE: DATA INCLUDE SCHEDULED AND NONSCHEDULED OPERATIONS.

SOURCE: CAB-FAA "AIRPORT ACTIVITY STATISTICS OF CERTIFIED ROUTE AIR CARRIERS."

IMPORTANT: SEE LAST PARAGRAPH IN THE INTRODUCTION TO THIS SECTION OF THE CHAPTER REGARDING 1981 TOTALS.

TABLE 4.4

*AMERICAN FLAG AIRLINE TRAFFIC ENPLANED AT FOREIGN
STATIONS: 1972 THROUGH 1981

YEAR	ENPLANED PASSENGERS			AIR CARRIER AIRCRAFT DEPARTURES	TONS OF ENPLANED MAIL	TONS OF ENPLANED CARGO
	TOTAL	DOMESTIC	INT'L NATIONAL			
1972	12,357,957	1,496,695	10,861,262	223,865	61,506.7	361,157.3
1973	12,614,201	1,822,134	10,792,067	224,793	71,413.6	366,634.1
1974	11,787,449	1,878,916	9,908,533	203,980	68,958.2	367,988.3
1975	10,908,448	1,946,322	8,962,126	189,918	62,206.1	363,510.7
1976	11,575,637	2,156,129	9,419,508	183,431	62,557.5	390,220.0
1977	12,319,732	2,413,989	9,905,743	178,711	63,124.1	384,406.4
1978	13,556,828	2,691,315	10,865,513	174,416	57,401.5	386,444.9
1979	15,422,473	3,018,989	12,403,484	181,857	54,902.0	400,667.0
1980	15,452,058	3,200,402	12,251,656	176,050	56,989.0	417,574.6
1981	15,473,356	3,122,244	12,351,112	174,513	53,913.1	457,816.5

* INCLUDES OPERATIONS OF CERTIFICATED ALL-CARGO CARRIERS.

NOTE: DATA INCLUDE SCHEDULED AND NONSCHEDULED OPERATIONS.

SOURCE: CAB-FAA "AIRPORT ACTIVITY STATISTICS OF CERTIFICATED ROUTE AIR CARRIERS."

IMPORTANT: SEE LAST PARAGRAPH IN THE INTRODUCTION TO THIS SECTION OF THE CHAPTER
REGARDING 1981 TOTALS.

TABLE 4-5
HELICOPTER TRAFFIC ENPLANED AT U.S. STATIONS
1972 THROUGH 1981

YEAR	NUMBER OF ENPLANED PASSENGERS	AIR CARRIER AIRCRAFT DEPARTURES	TONS OF ENPLANED MAIL	TONS OF ENPLANED CARGO
1972	588,288	79,979	200.5	969.2
1973	614,952	83,152	154.7	737.9
1974	591,622	80,743	163.5	418.3
1975	505,827	67,923	201.7	210.3
1976	443,651	54,123	109.0	148.8
1977	268,023	35,305	81.1	52.3
1978	282,539	31,779	54.9	53.5
1979	0	0	0	0
1980	0	0	0	0
1981*	--	--	--	--

NOTE: DATA INCLUDE SCHEDULED AND NONSCHEDULED OPERATIONS.
NO HELICOPTER CARRIERS OPERATED DURING 1979 AND 1980.

SOURCE: CAB-FAA "AIRPORT ACTIVITY STATISTICS OF CERTIFICATED ROUTE AIR CARRIERS."

*SEE EXPLANATION REGARDING THE IMPACT OF DEREGULATION IN THE INTRODUCTION TO CHAPTER 6.

TABLE 4-6
TOTAL ALL-CARGO AIRLINE TRAFFIC ENPLANED AT U.S. STATIONS
1972 THROUGH 1981

YEAR	TONS OF ENPLANED CARGO			TONS OF ENPLANED MAIL			AIR CARRIER AIRCRAFT DEPARTURES	ENPLANED PASSENGERS
	TOTAL	DOMESTIC	INTER-NATIONAL	TOTAL	DOMESTIC	INTER-NATIONAL		
1972*	416,286.2	217,611.8	198,674.4	37,452.9	6,993.3	30,459.6	28,756	65,905
1973*	517,311.9	306,600.9	210,711.0	48,934.5	16,589.7	52,344.8	31,096	58,395
1974*	573,810.4	321,405.3	252,405.1	44,368.2	16,086.5	28,281.7	31,181	25,680
1975*	537,500.2	284,131.9	253,368.3	38,831.6	10,021.6	28,809.9	28,585	45,591
1976*	538,569.7	285,332.5	253,237.4	37,880.7	8,466.7	29,414.0	25,771	37,340
1977*	578,053.8	332,200.2	245,853.6	37,423.5	9,525.8	27,897.7	25,575	16,020
1978*	769,549.1	495,296.0	274,253.1	45,221.5	17,443.3	27,778.2	32,314	21,151
1979*	839,299.5	574,185.3	265,114.2	35,015.4	14,614.2	20,401.2	31,135	5,518
1980*	861,678.6	582,757.4	278,921.2	39,370.8	16,769.5	22,601.3	29,853	3,202
1981	**	**	**	**	**	**	**	**

* THESE DATA ARE INCLUDED IN TABLE 4-2

** SEE EXPLANATION REGARDING THE IMPACT OF DEREGULATION IN THE INTRODUCTION TO CHAPTER 6.

NOTE: DATA INCLUDE SCHEDULED AND NONSCHEDULED OPERATIONS.

SOURCE: CAB-FAA "AIRPORT ACTIVITY STATISTICS OF CERTIFICATED ROUTE AIR CARRIERS."

TABLE 4.7
**SUMMARY OF AIRCRAFT DEPARTURES, ENPLANED REVENUE PASSENGERS, AND ENPLANED REVENUE TONS OF CARGO AND
 MAIL BY TYPE OF OPERATION, BY TYPE OF SERVICE, BY CARRIER GROUP, AND BY AIR CARRIER**
 12 months ending December 31, 1981

Carrier Group Air Line Type of Operation Type of Service	Aircraft departures			Enplaned passengers	Enplaned revenue tons				
	Total performed	Scheduled	Scheduled completed		Freight	Express	U.S. Mail		
							Priority	Nopriority	
MAJORS-----									
AMERICAN DOMESTIC-----	SCHEDULED 108	287282	288003	286103	23204576	323110.67	5962.70	71717.69	
	NON-SCHEDULED ALL SERVICES	287390	288003	286103	23221428	323119.39	5962.70	71717.69	
INTERNATIONAL-----	SCHEDULED 43	154224	15272	15152	1557706	19966.28		1280.61	
	NON-SCHEDULED ALL SERVICES	15469	15272	15152	1564814	19966.28		1280.61	
TOTAL-----	SCHEDULED 151	302708	303275	299255	24762282	343084.95	5962.70	72998.30	
	NON-SCHEDULED ALL SERVICES	302859	303275	299255	24766242	343085.67	5962.70	72998.30	
BRITISH DOMESTIC-----	SCHEDULED 264	143943	145694	143732	9109891	43838.74	1361.65	40662.85	
	NON-SCHEDULED ALL SERVICES	144207	145694	143732	9127637	43838.74	1361.65	40662.85	
INTERNATIONAL-----	SCHEDULED 75	17946	17989	17871	1315417	12407.07		2758.91	
	NON-SCHEDULED ALL SERVICES	18021	17989	17871	1321966	12407.07		2758.91	
TOTAL-----	SCHEDULED 339	161889	163683	161503	10425308	56245.81	1361.65	43421.76	
	NON-SCHEDULED ALL SERVICES	162228	163683	161603	10449633	56245.81	1361.65	43421.76	
CONTINENTAL DOMESTIC-----	SCHEDULED 10	113022	115282	112577	7801016	102081.44	412.20	23214.76	
	NON-SCHEDULED ALL SERVICES	113032	115282	112677	7801376	102081.44	412.20	23214.76	
INTERNATIONAL-----	SCHEDULED	9024	9023	8837	605055	9338.49		1777.79	
TOTAL-----	SCHEDULED 10	122046	124305	121514	8406071	111419.93	412.20	24992.55	
	NON-SCHEDULED ALL SERVICES	122056	124305	121514	8406431	111419.93	412.20	24992.55	
DELTA DOMESTIC-----	SCHEDULED 181	513410	524464	512470	34147171	237702.25	12269.23	169113.37	
	NON-SCHEDULED ALL SERVICES	513593	524464	512470	34157235	237702.25	12269.23	169113.37	
INTERNATIONAL-----	SCHEDULED 5	4056	4075	4040	628957	6425.22	.01	625.25	
	NON-SCHEDULED ALL SERVICES	4061	4075	4040	629179	6425.22	.01	625.25	
TOTAL-----	SCHEDULED 188	517466	528539	516510	34776128	244127.47	12269.24	169738.62	
	NON-SCHEDULED ALL SERVICES	517654	528539	516510	34786414	244127.47	12269.24	169738.62	
EASTERN DOMESTIC-----	SCHEDULED 307	496459	498533	488530	33255978	203962.92	13219.58	107088.58	
	NON-SCHEDULED ALL SERVICES	496766	498533	488530	33279533	203962.92	13219.58	107088.58	
INTERNATIONAL-----	SCHEDULED 65	26858	27034	26738	2409953	17575.78	124.61	1658.89	
	NON-SCHEDULED ALL SERVICES	26923	27034	26738	2413943	17575.78	124.61	1658.89	
TOTAL-----	SCHEDULED 372	523317	525567	515268	35665731	221538.70	13344.19	108747.47	
	NON-SCHEDULED ALL SERVICES	523689	525567	515268	35693476	221538.70	13344.19	108747.47	
NORTHWEST DOMESTIC-----	SCHEDULED 175	152209	156928	151841	9364556	153108.23	3244.68	43772.41	
	NON-SCHEDULED ALL SERVICES	152384	156928	151841	9405303	153289.39	3244.68	43772.41	
INTERNATIONAL-----	SCHEDULED 19	12047	12193	11058	1778598	98247.07		9817.37	
	NON-SCHEDULED ALL SERVICES	12066	12193	11058	1779545	98418.03		9817.37	
TOTAL-----	SCHEDULED 190	164256	169121	163699	11143154	251435.30	3244.68	53589.78	
	NON-SCHEDULED ALL SERVICES	164490	169121	163699	11184848	251707.42	3244.68	53589.78	
PAN AMERICAN DOMESTIC-----	SCHEDULED 226	76238	78269	75498	5761038	72304.36	29.71	18790.59	
	NON-SCHEDULED ALL SERVICES	76462	78269	75498	5812429	72304.36	29.71	18790.59	
INTERNATIONAL-----	SCHEDULED 396	66563	66249	64711	7783239	257795.86	13.26	24632.27	
	NON-SCHEDULED ALL SERVICES	66959	66249	64711	7830585	261278.05	13.26	24632.27	
TOTAL-----	SCHEDULED 620	142801	146698	140209	13544277	330100.22	42.97	43422.86	
	NON-SCHEDULED ALL SERVICES	143421	146698	140209	13643014	333582.41	42.97	43422.86	
REPUBLIC DOMESTIC-----	SCHEDULED 990	478491	484501	473676	16766776	60674.73	1610.11	41034.95	
	NON-SCHEDULED ALL SERVICES	479481	484501	473676	16828224	60674.73	1610.11	41034.95	
TWA DOMESTIC-----	SCHEDULED 40	199043	208022	198106	15352243	86304.73	777.91	56024.95	
	NON-SCHEDULED ALL SERVICES	199103	208022	198106	15355104	86304.73	777.91	56024.95	
INTERNATIONAL-----	SCHEDULED 94	14129	14384	14032	2635526	44474.40		16605.43	
	NON-SCHEDULED ALL SERVICES	14223	14384	14032	2637294	44474.45		16605.43	
TOTAL-----	SCHEDULED 154	213192	222606	212138	17987769	130779.13	777.91	72630.38	
	NON-SCHEDULED ALL SERVICES	213326	222606	212138	17992398	130779.38	777.91	72630.38	

TABLE 4.7
SUMMARY OF AIRCRAFT DEPARTURES, ENPLANED REVENUE PASSENGERS, AND ENPLANED REVENUE TONS OF CARGO AND
MAIL BY TYPE OF OPERATION, BY TYPE OF SERVICE, BY CARRIER GROUP, AND BY AIR CARRIER
12 months ending December 31, 1981

Carrier Group Air Carrier Type of Operation Type of Service	Aircraft departures			Enplaned Passenger	Enplaned revenue tons				Foreign mail		
	Total performed	Scheduled	Scheduled completed		Freight	Express	U.S. Mail				
							Priority	Nonpriority			
UNITED DOMESTIC-----											
SCHEDULED	377414	392161	375569	28689021	334522.12	11312.98	126862.52	51803.20			
NONSCHEDULED	3761			372257	391.79						
ALL SERVICES	301155	392161	375569	29061278	334913.91	11312.98	126862.52	51803.20			
US AIR DOMESTIC-----											
SCHEDULED	271564	281423	270577	11016303	28261.05	1315.33	49220.81				
NONSCHEDULED	892			57846							
ALL SERVICES	272436	281423	270577	11074149	28261.05	1315.33	49220.81				
WESTERN DOMESTIC-----											
SCHEDULED	120613	120832	119615	8474383	68658.45	2731.97	21879.55	13637.07			
NONSCHEDULED	105			10536							
ALL SERVICES	120718	120832	119615	8484919	68658.45	2731.97	21879.55	13637.07			
INTERNATIONAL-----											
SCHEDULED	6007	5966	5966	724659	8177.02	55.23	496.36	16.21			
NONSCHEDULED	3			288							
ALL SERVICES	6010	5966	5966	725147	8177.02	55.23	496.36	16.21			
TOTAL-----											
SCHEDULED	126620	125798	125559	9129242	76835.47	2787.15	22375.91	13653.28			
NONSCHEDULED	108			10824							
ALL SERVICES	126728	126798	125559	9210066	76835.47	2787.15	22375.91	13653.28			
TOTAL MAJORS-----											
DOMESTIC-----											
SCHEDULED	3229688	3294092	3206394	202942952	1714617.69	54248.00	770183.03	191446.57	1171.32		
NONSCHEDULED	7039			665663	493.67						
ALL SERVICES	3236272	3294092	3206394	203608615	1715111.36	54248.00	770183.03	191446.57	1171.32		
INTERNATIONAL-----											
SCHEDULED	177056	172185	169183	19439310	474407.19	193.11	59652.88	22794.03	19725.66		
NONSCHEDULED	700			68219	3653.40						
ALL SERVICES	177256	172185	169183	19507528	478060.59	193.11	59652.88	22794.03	19725.66		
TOTAL-----											
SCHEDULED	3401746	3466277	3375577	222382262	2189026.88	54441.11	829835.91	214240.60	15896.96		
NONSCHEDULED	7739			733881	4147.07						
ALL SERVICES	3409483	3466277	3375577	223116143	2193171.95	54441.11	829835.91	214240.60	15896.96		
NATIONALS-----											
AIR CALIFORNIA DOMESTIC-----											
SCHEDULED	57321	58458	56434	3490422	2656.70	66.10	1258.80				
NONSCHEDULED	245			21260							
ALL SERVICES	57566	58458	56434	3511682	2656.70	66.10	1258.80				
AIR FLORIDA DOMESTIC-----											
SCHEDULED	45760	46402	46907	1841930	48.91	10.23	142.65				
NONSCHEDULED	660			78065							
ALL SERVICES	46420	46402	46907	1869995	48.91	10.23	142.65				
INTERNATIONAL-----											
SCHEDULED	12705	13218	12397	627205	722.28	.61	120.66				
NONSCHEDULED	1841			214666							
ALL SERVICES	14636	13218	12397	861971	722.28	.61	120.66				
TOTAL-----											
SCHEDULED	58555	59620	57304	2469135	771.19	10.84	263.31				
NONSCHEDULED	2501			242731							
ALL SERVICES	61056	59620	57304	2711866	771.19	10.84	263.31				
AIRLIFT DOMESTIC-----											
SCHEDULED	147	154	116		2733.33						
NONSCHEDULED	4										
ALL SERVICES	151	154	116	154	2733.33						
INTERNATIONAL-----											
SCHEDULED	209	324	159		3106.22						
NONSCHEDULED	28				601.50						
ALL SERVICES	237	324	159		3707.72						
TOTAL-----											
SCHEDULED	356	488	275		5839.55						
NONSCHEDULED	32				601.50						
ALL SERVICES	388	488	275	154	6441.05						
ALASKA AIRLINES DOMESTIC-----											
SCHEDULED	28005	28403	27601	1309658	16312.79						
NONSCHEDULED	188			8469	620.46						
ALL SERVICES	28273	28403	27601	1318107	16733.25						
ALPHA DOMESTIC-----											
SCHEDULED	36010	36956	30789	2614200	5140.53						
NONSCHEDULED	6			76	.01						
ALL SERVICES	36016	36956	30789	2614276	5140.53						
FLYING TIGER DOMESTIC-----											
SCHEDULED	15839	16220	14651	9714	483582.49	8118.87	16503.86	3757.77			
NONSCHEDULED	51			9714	640.61						
ALL SERVICES	15990	16220	14651	9714	484023.10	8118.87	16503.86	3757.77			
INTERNATIONAL-----											
SCHEDULED	4882	4872	3884	71526	237732.83	.77	5660.36	8031.23			
NONSCHEDULED	333			71526	6258.27						
ALL SERVICES	5215	4872	3884	71526	243991.10	.77	5660.36	8031.23			
TOTAL-----											
SCHEDULED	20721	21100	18535	81240	721315.32	8119.64	21964.22	11709.22			
NONSCHEDULED	384			81240	6998.88						
ALL SERVICES	21105	21100	18535	720814.20	8119.64	21964.22	11709.22				
FRONTIER DOMESTIC-----											
SCHEDULED	175632	178663	175312	6285576	20092.47	995.90	19383.02				
NONSCHEDULED	37			2613							
ALL SERVICES	175665	178663	175312	6286109	20092.47	995.90	19383.02				
HAWAIIAN DOMESTIC-----											
SCHEDULED	37390	39670	34050	2917455	9120.85						
NONSCHEDULED	3			196							
ALL SERVICES	37401	39670	34050	2917629	9120.85						
NEWARK DOMESTIC-----											
SCHEDULED	112604	120304	112156	4159063	12197.56	230.44	14619.58	5.68			
NONSCHEDULED	1591			63002							
ALL SERVICES	114195	120304	112156	4222065	12197.56	230.44	14619.58	5.68			
PACIFIC SOUTHWEST DOMESTIC-----											
SCHEDULED	76085	77202	75966	6076662	8310.60						
NONSCHEDULED	309			3927							
ALL SERVICES	76394	77202	75966	6116969	8310.60						

TABLE 4.7
SUMMARY OF AIRCRAFT DEPARTURES, ENPLANED REVENUE PASSENGERS, AND ENPLANED REVENUE TONS OF CARGO AND
MAIL BY TYPE OF OPERATION, BY TYPE OF SERVICE, BY CARRIER GROUP, AND BY AIR CARRIER
12 months ending December 31, 1981

Carrier Group Air Carrier Type of Operation Type of Service	Aircraft departures			Enplaned passenger	Enplaned revenue tons				
	Total performed	Scheduled	Scheduled completed		Freight	Express	U.S. Mail		
							Priority	Nonpriority	
PIEDMONT DOMESTIC-----SCHEDULED NON SCHEDULED ALL SERVICES	180419 905 181324	182881 180055 180055	183055 180669 180669	7266266 7286135	17207.21 17207.21	501.82 501.82	18006.31 18006.31		
SOUTHWEST DOMESTIC-----SCHEDULED NON SCHEDULED ALL SERVICES	108532 25 108557	110819 108497 108497	108497 7563756 7566490						
TEXAS INT'L DOMESTIC-----SCHEDULED NON SCHEDULED ALL SERVICES	83678 1113 84791	86209 86234 83667	83667 3762253 3827610	9826.24 65157 9826.24	139.45 139.45	7129.48 7129.48		44.35 44.35	
HIEN AIR ALASKA DOMESTIC-----SCHEDULED NON SCHEDULED ALL SERVICES	89056 636 89692	70287 70287 62035	945001 20860 985861	33797.51 2083.60 35081.17		12363.95 12363.95	13613.95 13617.75		
TOTAL - NATIONALS DOMESTIC-----SCHEDULED NON SCHEDULED ALL SERVICES	1046566 5773 1052339	1052461 1052461	1005636 1005636	48232202 282074 48514276	621027.23 2944.68 623971.91	10062.89 10062.89	109962.60 109962.60	22025.21 22029.01	
INTERNATIONAL-----SCHEDULED NON SCHEDULED ALL SERVICES	17886 2202 20088	18414 18414 16440	16440 286192 913397	627205 6859.77 24821.10	241561.33 6859.77 24821.10	1.38 1.38	5581.02 5581.02	8031.23 8031.23	
TOTAL -----SCHEDULED NON SCHEDULED ALL SERVICES	1064452 7975 1072427	1070855 1070855 1022076	1022076 568266 49427673	48859407 568266 872393.01	882588.56 9804.45 10064.27	10064.27 10064.27	115543.02 115543.02	30856.46 30860.00	
LARGE REGIONALS-----								44.35 44.35	
AIR MIDWEST DOMESTIC-----SCHEDULED NON SCHEDULED ALL SERVICES	58483 38 58521	65779 58111 65779	58111 284079 58111	284079 163 284242	792.51 792.51	38.42 38.42	87.78 87.78		
AIR NEW ENGLAND DOMESTIC-----SCHEDULED NON SCHEDULED ALL SERVICES	22129 29 22158	23112 23112 21858	21858 222175 222413	222175 138 239.36	239.36 239.36		330.08 330.08		
AIR WISCONSIN DOMESTIC-----SCHEDULED	53638	55983	53568	704560	1089.00		263.00		
ALASKA INT'L AIR DOMESTIC-----SCHEDULED	2563	2523	2105		14645.00		22.00	3750.00	
AT AIR DOMESTIC-----SCHEDULED NON SCHEDULED ALL SERVICES	17282 8 17290	18943 18943 17278	17278 174 300667	300667 174 300841					
ASPEN DOMESTIC-----SCHEDULED NON SCHEDULED ALL SERVICES	11937 382 12319	11920 13320 11855	11855 5316 249363	244047 5316 24925	249.17 .00 249.25				
CASCADE AIRWAYS DOMESTIC-----SCHEDULED NON SCHEDULED ALL SERVICES	49997 19 50016	54056 54056 49993	49993 96 235364	235268 96 344.92	344.92 344.92		299.64 299.64		
GOLDEN GATE DOMESTIC-----SCHEDULED	33163	35937	33163	377386					
GOLDEN WEST DOMESTIC-----SCHEDULED NON SCHEDULED ALL SERVICES	42973 21 42994	45260 45260 42755	42755 112 651762	651762 112 651874	262.36 262.36				
MIDWAY AIRLINES, INC. DOMESTIC-----SCHEDULED	18728	18995	19728	924258					
MISSISSIPPI VALLEY DOMESTIC-----SCHEDULED	29873	32210	29543	363799	323.20		137.60		
MUSE AIR DOMESTIC-----SCHEDULED NON SCHEDULED ALL SERVICES	2747 6 2753	3896 3896 3596	3596 863 193075	192212 863 2646.00	2646.00				
NEW YORK AIR DOMESTIC-----SCHEDULED NON SCHEDULED ALL SERVICES	21748 3 21751	23290 23290 21702	21702 156 156	1562121 156 1562677	2.01 2.01				
PEOPLE EXPRESS DOMESTIC-----SCHEDULED	14890	15899	14760	952020					
REFEF DOMESTIC-----SCHEDULED NON SCHEDULED ALL SERVICES	3996 80 4074	3921 3921 3839	3839 1360 74918	73578 1360 1928.26	1871.00 57.26 1928.26		3568.62 1.41 3570.03		
ROCKY MOUNTAIN DOMESTIC-----SCHEDULED	5891	6611	5882	75806	65.16				
SWIFT DOMESTIC-----SCHEDULED NON SCHEDULED ALL SERVICES	9656 1 9657	9882 9882 9656	9854 28 134850	134850 28 134878	47.50 47.50				
TOTAL - LARGE REGIONALS DOMESTIC-----SCHEDULED NON SCHEDULED ALL SERVICES	399692 587 400279	430617 430617 398490	398490 8485 7337472	7298086 8485 22634.93	22977.19 57.36 22634.93	38.42 38.42 38.42	4571.92 1.41 4573.33	3887.60 3887.60 3887.60	

TABLE 4.7
SUMMARY OF AIRCRAFT DEPARTURES, ENPLANED REVENUE PASSENGERS, AND ENPLANED REVENUE TONS OF CARGO AND
MAIL BY TYPE OF OPERATION, BY TYPE OF SERVICE, BY CARRIER GROUP, AND BY AIR CARRIER
12 months ending December 31, 1981

Carrier Group Air Carrier Type of Operation Type of Service	Aircraft departures			Enplaned passenger	Enplaned revenue tons				
	Total performed	Scheduled	Scheduled completed		Freight	Express	U.S. Mail		
							Priority	Nonpriority	
MEDIUM REGIONALS									
AEROMECH INC. DOMESTIC-----SCHEDULED	8999	9451	8999	64969	12.30	.17	14.98		
AIR NEVADA DOMESTIC-----SCHEDULED	3654	1263	1263	20258					
AIR NORTHERN VANA DOMESTIC-----SCHEDULED	8424	8424	8399	18901	984.13		200.88		
AIR NORTH INC. DOMESTIC-----SCHEDULED	24165	25537	24161	140559	232.20	.76		26.05	
APOLLO DOMESTIC-----SCHEDULED NON SCHEDULED ALL SERVICES	3578 136 3714	3779 3774	3553	24909 20 24929			.05 .05		
BIG SKY DOMESTIC-----SCHEDULED	22234	24113	21589	66345	463.26				
COCHESE DOMESTIC-----SCHEDULED NON SCHEDULED ALL SERVICES	18315 10 18325	21030 21030	15348	94243 273 94516	153.39 153.39				
CORGAN AIRWAYS DOMESTIC-----SCHEDULED	3080	3177	3047	10379	6.80				
EMPIRE AIRLINES DOMESTIC-----SCHEDULED NON SCHEDULED ALL SERVICES	26168 40 26208	27132 27132	26036	609306 931 410235	71.00 71.00	22.00 22.30	3.00 3.00		
GUY-AMERICA INTERNATIONAL-----SCHEDULED	64	64	64	5884	58.35				
IMPERIAL DOMESTIC-----SCHEDULED	29138	39672	29039	189910	45.77				
KODIAK AIRWAYS DOMESTIC-----SCHEDULED NON SCHEDULED ALL SERVICES	15753 1904 17657	12971 12971	9569	17041 272 19313	212.96 76.09 287.05		233.69 10.89 264.58		
MACKY INTERNATIONAL-----SCHEDULED	2324	2158	2066	14442					
MID-SOUTH AVIATION DOMESTIC-----SCHEDULED	7596	7747	7553	39521					
MIDSTATE DOMESTIC-----SCHEDULED	9699	10573	9607	65956	48.00				
MINN. NORTHERN DOMESTIC-----SCHEDULED NON SCHEDULED ALL SERVICES	7086 263 8249	7741 7741	7152 7162	9171 634 9405	130.22 2.57 132.79		976.06 976.06		
NEWAIR FLIGHT DOMESTIC-----SCHEDULED	10299	11621	10296	46815	11.55				
SEA AIRLINES, INC. DOMESTIC-----SCHEDULED NON SCHEDULED ALL SERVICES	16956 1724 18680	16661 16661	13562	58628 7091 65719	1778.61 1030.52 2017.13		3535.47 3535.47	932.42 932.42	
SKYWEST DOMESTIC-----SCHEDULED	17745	17519	17114	92157	162.80		20.80		
WESTERN YUKON AIR DOMESTIC-----SCHEDULED NON SCHEDULED ALL SERVICES	2088 1728 3816	2245 2245	1775	4213 1661 5674	16.02 73.73 69.75				
WRIGHT DOMESTIC-----SCHEDULED NON SCHEDULED ALL SERVICES	10027 7 10034	10483 10483	10027	142407 331 142738					
TOTAL - MEDIUM REGIONALS DOMESTIC-----SCHEDULED NON SCHEDULED ALL SERVICES	245906 5812 251716	258934 13013	228039 1506699	1493686 1188.91 5517.92	4329.01 22.93	5004.88 5015.82	958.47 958.47		
TOTAL -----SCHEDULED	2308	2222	2128	21326	58.35				
TOTAL -----SCHEDULED NON SCHEDULED ALL SERVICES	248292 5812 254104	261156 13013	230227 1528025	1515012 1188.91 5576.27	4387.36 22.93	5004.88 5015.82	958.47 958.47		
OVER-ALL TOTAL - ALL CARRIERS DOMESTIC-----SCHEDULED NON SCHEDULED ALL SERVICES	4921850 19211 491061	5036086 187751	4838619 20087041	259967026 13013 260937062	2362551.12 1188.91 2367235.72	64372.24 22.93	889722.43 5015.82	219117.85 12.35 219121.65	
INTERNATIONAL-----SCHEDULED	192330	192821	187751	20087041	716026.87	194.49	65233.90	30825.26	
INTERNATIONAL-----SCHEDULED NON SCHEDULED ALL SERVICES	2902 195232	192821	187751	20442251	554410 1323646 20442251	10313.17 15197.77 726340.04	64372.24 194.49	889734.70 65233.90	
TOTAL -----SCHEDULED NON SCHEDULED ALL SERVICES	914180 22113 5136293	9228905 22113 5228905	9026370 20055667 5026370	201379313 3078377.99 1323646 3093775.76	64366.73 64366.73	194.49 12.35 12.35	889722.43 5015.82	249963.11 3.80 249960.91	
				89					

TABLE 4B
**SUMMARY OF AIRCRAFT DEPARTURES, ENPLANED REVENUE PASSENGERS, AND ENPLANED REVENUE TONS OF CARGO AND
 MAIL BY TYPE OF OPERATION, BY TYPE OF SERVICE, AND BY STATE AND COUNTRY**

12 months ending December 31, 1981

State or Country Type of Operation Type of Service	Aircraft departures			Enplaned passenger	Enplaned revenue tons				
	Total performed	Scheduled	Scheduled completed		Freight	Express	U.S. Mail		
							Priority	Nopriority	
50 U. S. STATES									
ALABAMA----- DOMESTIC----- SCHEDULED NON-SCHEDULED ALL SERVICES	42087 66 42153	42575 42575	41800 3451 399361	1395910 3834.50 3834.50	305.78 305.78	3794.03 3794.03	19.37 19.37		
ALASKA----- DOMESTIC----- SCHEDULED NON-SCHEDULED ALL SERVICES	164248 6470 170718	140457 140467	125925 125826	2031217 37678 2038995 133222.73	129473.82 3748.91 2485.64	2485.64 2485.64	25277.01 12.30 25289.31	23836.38 3.80 23840.18	
INTERNATIONAL--- SCHEDULED NON-SCHEDULED ALL SERVICES	836 2 838	766 766	726 726	19799 1.84 19799	29970.15 29980.99	.30 .30	2490.57 1474.28	69.38 69.38	
TOTAL----- SCHEDULED NON-SCHEDULED ALL SERVICES	165084 6472 171556	141233 141233	126552 126552	2021016 17678 2058694 163203.72	159452.97 3750.75 2485.94	2485.94 2485.94	27767.58 12.30 27779.88	25310.65 3.80 25314.46	
ARIZONA----- DOMESTIC----- SCHEDULED NON-SCHEDULED ALL SERVICES	91992 86 92078	93523 93523	87589 87689	4286964 4291403	15159.27 15159.27	676.54 676.54	8387.09 8387.09	2668.45 2668.45	
ARKANSAS----- DOMESTIC----- SCHEDULED NON-SCHEDULED ALL SERVICES	18209 7 18216	18652 18652	18177 18177	541894 436 542330	1501.88 1501.88	74.32 74.32	2021.11 2021.11	5.09 5.08	
CALIFORNIA----- DOMESTIC----- SCHEDULED NON-SCHEDULED ALL SERVICES	497817 1385 499202	520808 520808	494143 31513535 48460 31597995	459925.19 154.09 460079.27	11547.20 11547.20	100752.52 100752.52	32702.88 32702.88	54.48 54.48	
INTERNATIONAL--- SCHEDULED NON-SCHEDULED ALL SERVICES	5509 10 5519	5484 5484	5449 5449	863367 1221 864588 13266.03	13087.14 176.89 52.60	52.60 2690.92	318.44 318.44	3.67 3.67	
TOTAL----- SCHEDULED NON-SCHEDULED ALL SERVICES	503326 1395 504721	526292 526292	497592 499592	323764.02 85681 32462583 473345.30	473012.32 332.98 11599.80	11599.80	103443.44 103443.44	33021.32 33021.32	
COLORADO----- DOMESTIC----- SCHEDULED NON-SCHEDULED ALL SERVICES	182946 362 183306	188841 188841	182231 182201	10973425 11960 10982385	65025.73 1466.29	1466.29	33245.75 33245.75	2785.80 2785.80	
INTERNATIONAL--- SCHEDULED	130	131	130	25034	203.99	.13	27.85		
TOTAL----- SCHEDULED NON-SCHEDULED ALL SERVICES	183076 362 183436	188972 188972	182331 182331	10954549 11960 11007419	65229.72 1466.42	1466.42	33273.60 33273.60	2785.80 2785.80	
CONNECTICUT----- DOMESTIC----- SCHEDULED NON-SCHEDULED ALL SERVICES	28899 46 28945	29752 29762	23745 28745	1180900 3419 11943118	10722.37 10722.37	297.14 297.14	7292.90 7292.90	1536.05 1536.06	
DELAWARE----- DOMESTIC----- SCHEDULED	80	100	80	126					
DIST. OF COLUMBIA----- DOMESTIC----- SCHEDULED NON-SCHEDULED ALL SERVICES	113549 89 113638	114704 114704	111448 111448	7178384 5701 7184085	16992.32 16992.32	678.40 678.40	20741.55 20741.55	16313.23 16313.23	
INTERNATIONAL--- SCHEDULED NON-SCHEDULED ALL SERVICES	505 2 507	517 517	500 500	101596 137 101733	1735.26 1735.26		1344.92 1344.92		
TOTAL----- SCHEDULED NON-SCHEDULED ALL SERVICES	114054 91 114145	115221 115221	111948 111948	7279980 5838 7285818	18727.58 18727.58	678.40 678.40	31086.47 31086.47	16313.23 16313.23	
FLORIDA----- DOMESTIC----- SCHEDULED NON-SCHEDULED ALL SERVICES	327488 981 328469	332619 332619	325334 325334	18861681 50883 18742564	104803.07 71.93 104875.00	2053.28 2053.28	34963.53 34963.53	3991.36 3991.36	
INTERNATIONAL--- SCHEDULED NON-SCHEDULED ALL SERVICES	505 2 507	517 517	500 500	101596 137 101733	1735.26 1735.26		1344.92 1344.92		
TOTAL----- SCHEDULED NON-SCHEDULED ALL SERVICES	345958 1956 347912	351352 351352	343507 341507	20408569 165651 20574220	158085.89 1236.93 160122.82	2057.03 2057.03	39585.92 39585.92	4489.71 4489.71	
GEORGIA----- DOMESTIC----- SCHEDULED NON-SCHEDULED ALL SERVICES	268269 236 268503	273394 273394	267669 267669	19107202 6928 19114130	148875.26 148875.26	11308.14 11308.14	96320.86 96320.86	419.30 419.30	
INTERNATIONAL--- SCHEDULED NON-SCHEDULED ALL SERVICES	2615 9 2624	2635 2635	2606 2606	314728 222 314950	4249.77 2.27	20.06 20.06	605.63 605.63	1.51 1.51	
TOTAL----- SCHEDULED NON-SCHEDULED ALL SERVICES	270884 243 271127	276029 276029	270275 270275	19421930 7150 19429080	153125.03 153125.03	11328.20 11328.20	96926.49 96926.49	420.81 420.81	
HAWAII----- DOMESTIC----- SCHEDULED NON-SCHEDULED ALL SERVICES	84786 154 84940	88022 88022	76149 76149	8096292 26489 8122981	83214.17 11.04 83227.21	235.38 235.38	10528.55 10528.55	5249.76 5249.76	
INTERNATIONAL--- SCHEDULED NON-SCHEDULED ALL SERVICES	2795 2 2797	2838 2838	2771 2771	482289 2.27 482289	8241.69 8243.96		6269.30 6269.30	1051.01 1051.01	
								6.78 6.78	

TABLE 4.8
SUMMARY OF AIRCRAFT DEPARTURES, ENPLANED REVENUE PASSENGERS, AND ENPLANED REVENUE TONS OF CARGO AND
MAIL BY TYPE OF OPERATION, BY TYPE OF SERVICE, AND BY STATE AND COUNTRY
(12 months ending December 31, 1981)

State or Country Type of Operation Type of Service	Aircraft departures			Enplaned passenger	Enplaned revenue tons				
	Total performed	Scheduled	Scheduled completed		Freight	U.S. Mail		Foreign mail	
						Priority	Nonpriority		
HAWAII-----									
TOTAL-----	87581	90860	78920	8578581	91455.86	235.38	16797.85	6801.57	
DOMESTIC-----	156			26689	15.31			663.72	
NON SCHEDULED ALL SERVICES	87737	90860	78920	8605270	91471.17	235.38	16797.85	6801.57	
IDAHODOMESTIC-----	29894	30865	29661	505162	1257.55	67.32	1860.60	8.73	
NON SCHEDULED ALL SERVICES	32			2134					
NON SCHEDULED ALL SERVICES	29926	30865	29661	587296	1257.55	67.32	1860.60	8.73	
ILLINOIS-----									
DOMESTIC-----	280240	291950	279059	17181550	322961.15	8976.06	72388.62	29619.05	
SCHEDULED	843			71662	122.96				
NON SCHEDULED				325084.11	8976.06	72388.62	29619.05	16.96	
ALL SERVICES	281083	291950	279059	17253212					
INTERNATIONAL-----	1343	1392	1324	204326	17243.08		1545.32	27.51	
SCHEDULED	3			314.83					
NON SCHEDULED				17557.91					
ALL SERVICES	1346	1392	1324	204326			1545.32	27.51	
TOTAL-----	281583	293342	28383	17585876	340204.23	8976.06	73933.94	29446.56	
DOMESTIC-----	846			71662	437.79			16.96	
NON SCHEDULED ALL SERVICES	282429	293342	280583	17457530	340642.02	8976.06	73933.94	29446.56	
INDIANA-----									
DOMESTIC-----	58370	60828	58147	1765691	8456.49	503.49	8777.21	994.24	
SCHEDULED	68			3923					
NON SCHEDULED				1769214	8456.49	503.49	8777.21	994.24	
ALL SERVICES	58438	60828	58147						
IOWA-----									
DOMESTIC-----	38135	41054	37990	901450	2500.15	88.36	5813.64	57.38	
SCHEDULED	317			16366					
NON SCHEDULED				917816	2500.15	88.36	5813.64	57.38	
ALL SERVICES	38452	41054	37990						
KANSAS-----									
DOMESTIC-----	36610	40254	36461	627762	2325.38	39.63	2745.38	6.19	
SCHEDULED	28			492					
NON SCHEDULED				626254	2325.38	39.63	2745.38	6.19	
ALL SERVICES	36638	40254	36461						
KENTUCKY-----									
DOMESTIC-----	26995	29524	29931	1129482	3819.49	257.52	6080.42	15.23	
SCHEDULED	81			5225					
NON SCHEDULED				1132707	3819.49	257.52	6080.42	15.23	
ALL SERVICES	29076	29524	29931						
LOUISIANA-----									
DOMESTIC-----	73521	75016	73328	3724909	10039.13	317.95	7457.77	456.57	
SCHEDULED	144			10896				.01	
NON SCHEDULED				3735805	10039.13	317.95	7457.77	456.57	
ALL SERVICES	73685	75016	73328						
INTERNATIONAL-----	1269	1267	1264	92086	874.66	.06	24.65	.10	
SCHEDULED	2			162					
NON SCHEDULED				92248	874.66	.06	24.65	.10	
ALL SERVICES	1271	1267	1264						
TOTAL-----	74790	76283	74592	3816995	10913.79	318.01	7482.42	456.67	
SCHEDULED	146			11058				.01	
NON SCHEDULED				3828053	10913.79	318.01	7482.42	456.67	
ALL SERVICES	74936	76283	74592						
MAINE-----									
DOMESTIC-----	9499	9833	9479	351577	2064.72	28.96	260.54		
SCHEDULED									
NON SCHEDULED									
ALL SERVICES									
MARYLAND-----									
DOMESTIC-----	32149	33213	31956	1472727	12678.55	362.68	7745.55	3237.61	
SCHEDULED	190			12658					
NON SCHEDULED				1485385	12678.55	362.68	7745.55	3237.61	
ALL SERVICES	32339	33213	31956						
INTERNATIONAL-----									
SCHEDULED	364	368	361	36053	327.96	.31	4.24	.14	
NON SCHEDULED	7			545					
ALL SERVICES	371	368	361	36598	327.96	.31	4.24	.14	
TOTAL-----	32913	33581	32317	1508780	13006.51	362.99	7749.79	3237.75	
SCHEDULED	197			13233					
NON SCHEDULED				1521983	13006.51	362.99	7749.79	3237.75	
ALL SERVICES	32710	33581	32317						
MASSACHUSETTS-----									
DOMESTIC-----	89061	90612	87410	6277702	67920.36	1422.76	20939.06	7649.38	
SCHEDULED	277			27677				38.92	
NON SCHEDULED				6305379	67920.36	1422.76	20939.06	7649.38	
ALL SERVICES	89338	90612	87410						
INTERNATIONAL-----									
SCHEDULED	2032	2057	1990	345473	18660.99	.01	1979.61	192.15	
NON SCHEDULED	96			6704					
ALL SERVICES	2126	2057	1990	352177					
TOTAL-----	91093	92669	89400	6623175	21312.06	.01	1979.61	192.15	
SCHEDULED	371			34381					
NON SCHEDULED				6657556	21312.06	.01	1979.61	192.15	
ALL SERVICES	91464	92669	89400						
MICHIGAN-----									
DOMESTIC-----	126453	130399	123222	5701397	41329.44	1022.87	22142.47	3705.80	
SCHEDULED	318			36149				.69	
NON SCHEDULED				5737596	41329.44	1022.87	22142.47	3705.80	
ALL SERVICES	126771	130399	123222						
MINNESOTA-----									
DOMESTIC-----	94290	95925	93691	4692716	43939.11	727.19	21772.04	3357.38	
SCHEDULED	582			96520				147.14	
NON SCHEDULED				4749234	43939.11	727.19	21772.04	3357.38	
ALL SERVICES	94675	95925	93691						
INTERNATIONAL-----									
SCHEDULED	230	239	230	57871	1653.59		74.75		
NON SCHEDULED	6				1653.59		74.75		
ALL SERVICES	236	239	230	57871					
TOTAL-----	94520	96164	93921	4750585	45592.70	727.19	21846.79	3357.38	
SCHEDULED	591			56520				147.14	
NON SCHEDULED				4807105	45592.70	727.19	21846.79	3357.38	
ALL SERVICES	95111	96164	93921						
MISSISSIPPI-----									
DOMESTIC-----	19631	19960	19562	502703	2027.27	24.20	1990.71		
SCHEDULED	1			71					
NON SCHEDULED				502774	2027.27	24.20	1990.71		
ALL SERVICES	19632	19960	19562						

TABLE 4.8
SUMMARY OF AIRCRAFT DEPARTURES, ENPLANED REVENUE PASSENGERS, AND ENPLANED REVENUE TONS OF CARGO AND
MAIL BY TYPE OF OPERATION, BY TYPE OF SERVICE, AND BY STATE AND COUNTRY

12 months ending December 31, 1981

State or Country Type of Operation Type of Service	Aircraft departures			Enplaned passenger	Enplaned revenue tons				
	Total performed	Scheduled	Scheduled completed		Freight	Express	U.S. Mail		
							Priority	Nonpriority	
MISSISSIPPI.....									
MISSOURI.....									
DOMESTIC--SCHEDULED	159479	165299	158872	7596636	25972.82	577.66	34804.63	4594.77	
NON-SCHEDULED	572		19991						
ALL SERVICES	160051	165299	158872	7616627	25972.82	577.66	34804.63	4594.77	
MONTANA.....									
DOMESTIC--SCHEDULED	36186	37676	35711	694300	1649.94	43.91	2693.76	11.11	
NEBRASKA.....									
DOMESTIC--SCHEDULED	30451	31309	30178	986610	2365.23	137.83	7743.80	28.72	
NON-SCHEDULED	82		5078						
ALL SERVICES	30533	31309	30178	991488	2365.23	137.83	7743.80	28.72	
NEVADA.....									
DOMESTIC--SCHEDULED	85302	84698	82822	5155884	4413.81	217.11	4811.86	87.63	
NON-SCHEDULED	1270		201577				.05		
ALL SERVICES	86572	84698	82822	5357461	4413.81	217.11	4811.91	87.63	
INTERNATIONAL--SCHEDULED	33		31	3723	.26				
TOTAL-----	85335	84729	82853	5159607	4414.05	217.11	4811.86	87.63	
DOMESTIC--NON-SCHEDULED				201577			.05		
ALL SERVICES	86605	84729	82853	5361184	4414.05	217.11	4811.91	87.63	
N.H. HAMPSHIRE.....									
DOMESTIC--SCHEDULED	2847	3030	2818	22013	20.15		21.81		
NEW JERSEY.....									
DOMESTIC--SCHEDULED	62176	64111	61827	4453988	28554.71	1594.92	15260.09	9290.81	
NON-SCHEDULED	144		994		26.33				
ALL SERVICES	62320	64111	61827	4469280	28583.04	1594.92	15260.09	9290.81	
INTERNATIONAL--SCHEDULED	595	603	590	64076	715.21	2.84	128.45	127.73	
NON-SCHEDULED	2		288						
ALL SERVICES	597	603	590	64364	715.21	2.84	128.45	127.73	
TOTAL-----	62771	64715	62417	4523662	29271.92	1597.76	15388.54	9418.56	
DOMESTIC--NON-SCHEDULED				29271.92					
ALL SERVICES	62917	64714	62417	4533644	29298.25	1597.76	15388.54	9418.56	
NEW MEXICO.....									
DOMESTIC--SCHEDULED	33518	35370	33306	994167	1966.93	28.84	3071.20	496.66	
NON-SCHEDULED	15		126						
ALL SERVICES	33533	35370	33306	994293	1966.93	28.84	3071.20	496.66	
NEW YORK.....									
DOMESTIC--SCHEDULED	291928	299311	287693	17811851	270071.74	4215.31	58875.10	34552.24	
NON-SCHEDULED	619		45714		75.20				
ALL SERVICES	292547	299311	287693	17857565	270146.94	4215.31	58875.10	34552.24	
INTERNATIONAL--SCHEDULED	13410	13545	13125	2308073	97993.84	105.85	21696.94	4452.10	
NON-SCHEDULED	410		10913		4529.74				
ALL SERVICES	13820	13535	13125	2408986	102573.58	105.85	21696.94	4452.10	
TOTAL-----	305338	312046	300818	2011926	368065.58	4321.16	80572.04	39004.34	
DOMESTIC--NON-SCHEDULED				2011926	46627				
ALL SERVICES	306367	312046	300818	20266551	372670.52	4321.16	80572.04	39004.34	
NORTH CAROLINA.....									
DOMESTIC--SCHEDULED	106166	107789	105834	3946161	18509.89	1372.73	15369.58	74.79	
NON-SCHEDULED	463		9564						
ALL SERVICES	106629	107789	105834	3955725	18509.89	1372.73	15369.58	74.79	
NORTH DAKOTA.....									
DOMESTIC--SCHEDULED	24012	24995	23750	646347	976.55	11.90	1472.72	3.63	
NON-SCHEDULED	14		670						
ALL SERVICES	24026	24995	23750	647017	976.55	11.90	1472.72	3.63	
OHIO.....									
DOMESTIC--SCHEDULED	138482	142991	137932	6151371	34163.32	1932.08	23704.90	2129.95	
NON-SCHEDULED	268		11204		46.72				
ALL SERVICES	138750	142991	137932	6162275	36208.04	1932.08	23704.90	2129.96	
OKLAHOMA.....									
DOMESTIC--SCHEDULED	42876	44437	42777	2248663	5271.54	155.30	9215.10	989.18	
NON-SCHEDULED	121		9181						
ALL SERVICES	42997	44437	42777	2257044	5271.54	155.30	9215.10	989.18	
OREGON.....									
DOMESTIC--SCHEDULED	42436	43697	42100	2003329	18410.70	313.84	7043.41	1426.41	
NON-SCHEDULED	42		2378						
ALL SERVICES	42478	43697	42100	2005707	18410.70	313.84	7043.41	1426.41	
PENNSYLVANIA.....									
DOMESTIC--SCHEDULED	156441	162764	155863	8210936	42619.24	1627.31	35709.59	13584.14	
NON-SCHEDULED	551		16506						
ALL SERVICES	156992	162764	155863	8247462	42619.24	1627.31	35709.59	13584.14	
INTERNATIONAL--SCHEDULED	459	471	457	51174	303.27	.35	78.23	.03	
NON-SCHEDULED	1		137						
ALL SERVICES	460	471	457	51311	303.27	.35	78.23	.03	
TOTAL-----	156900	163235	156320	8242110	42922.51	1627.66	35787.02	13584.17	
DOMESTIC--NON-SCHEDULED				8242110					
ALL SERVICES	552		36663						
157652	163235	156320	8249753	42922.51	1627.66	35787.02	13584.17		
RHODE ISLAND.....									
DOMESTIC--SCHEDULED	8300	8644	8269	319238	803.84	34.9	1345.98	1.02	
NON-SCHEDULED	14		556						
ALL SERVICES	8314	8644	8269	319794	803.84	34.94	1345.98	1.02	
SOUTH DAKOTA.....									
DOMESTIC--SCHEDULED	26807	27186	26631	1208661	2426.41	347.08	3668.05	22.99	
NON-SCHEDULED	19		1645						
ALL SERVICES	26822	27186	26631	1210306	2426.41	347.08	3668.05	22.99	

TABLE 4.B
SUMMARY OF AIRCRAFT DEPARTURES, ENPLANED REVENUE PASSENGERS, AND ENPLANED REVENUE TONS OF CARGO AND
MAIL BY TYPE OF OPERATION, BY TYPE OF SERVICE, AND BY STATE AND COUNTRY

12 months ending December 31, 1961

State or Country Type of Operation Type of Service	Aircraft departure			Enplaned passengers	Enplaned revenue tons				Foreign mail		
	Total performed	Scheduled	Scheduled completed		Freight	U.S. Mail					
						Priority	Nonpriority				
SOUTH CAROLINA.....											
SOUTH DAKOTA.....											
DOMESTIC--	SCHEDULED 23765	23633	23600	346015	1204.22	36.20	1698.40	3.31			
	NONSCHEDULED 57			1022		.43					
	ALL SERVICES 23622	23633	23600	347037	1204.22	36.20	1698.40	3.31			
TENNESSEE.....											
DOMESTIC--	SCHEDULED 96582	97595	96211	3729435	19899.13	844.23	17973.68	361.79			
	NONSCHEDULED 156			6512							
	ALL SERVICES 96730	97595	96211	3732167	19899.13	844.23	17973.68	361.79			
TEXAS.....											
DOMESTIC--	SCHEDULED 421203	430626	421176	26795830	131117.81	3274.51	88147.81	5418.44	71.72		
	NONSCHEDULED 1091			57563		.43					
	ALL SERVICES 422294	430626	421176	26853593	131118.24	3274.51	88147.81	5418.44	71.72		
INTERNATIONAL--	SCHEDULED 6335	6324	6285	592052	8061.38	.44	967.96	.14			
	NONSCHEDULED 43			4035	202.48						
	ALL SERVICES 6378	6324	6285	596087	8263.86	.44	967.96	.14			
TOTAL-----	SCHEDULED 427958	436950	427461	27387882	139170.19	3274.95	69115.77	5418.44	71.26		
	NONSCHEDULED 1136			61598		202.91					
	ALL SERVICES 426672	436950	427461	27449880	139382.10	3274.95	69115.77	5418.44	71.26		
UTAH.....											
DOMESTIC--	SCHEDULED 47313	48105	47072	1923049	8255.18	302.15	7144.97	515.44			
	NONSCHEDULED 70			4808							
	ALL SERVICES 47392	48105	47072	1927857	8255.18	302.15	7144.97	515.44			
VERMONT.....											
DOMESTIC--	SCHEDULED 7305	7568	7270	170350	498.03	6.25	118.73				
VIRGINIA.....											
DOMESTIC--	SCHEDULED 57872	59655	57675	2092366	3337.50	160.55	2590.74	8.01	.05		
	NONSCHEDULED 113			4947							
	ALL SERVICES 57985	59655	57675	2097313	3337.50	160.55	2590.74	8.01	.05		
WASHINGTON.....											
DOMESTIC--	SCHEDULED 115273	119966	114666	4971789	113980.25	1579.07	23331.93	4851.18	111.66		
	NONSCHEDULED 164			10040	178.60						
	ALL SERVICES 115437	119966	114666	4981829	114158.85	1579.07	23331.93	4851.18	111.66		
INTERNATIONAL--	SCHEDULED 850	854	833	169963	5832.47		2174.68	512.33	66.22		
	NONSCHEDULED 3						2174.68	512.33	66.22		
	ALL SERVICES 861	854	833	169963	5832.47						
TOTAL-----	SCHEDULED 116131	120820	115299	5141752	119012.72	1579.07	25506.61	5363.51	177.88		
	NONSCHEDULED 167			10040	178.60						
	ALL SERVICES 116298	120820	115299	5151792	119991.32	1579.07	25506.61	5363.51	177.88		
WEST VIRGINIA.....											
DOMESTIC--	SCHEDULED 17385	17892	17347	322056	321.64	19.57	554.19				
	NONSCHEDULED 43			614							
	ALL SERVICES 17428	17892	17347	323270	321.64	19.57	554.19				
WISCONSIN.....											
DOMESTIC--	SCHEDULED 77222	80080	76442	2326608	8311.96	142.29	6637.33	72.62			
	NONSCHEDULED 261			17188							
	ALL SERVICES 77483	80080	76442	2345798	8311.96	142.29	6637.33	72.62			
WYOMING.....											
DOMESTIC--	SCHEDULED 13064	16283	13782	260856	898.03	28.63	453.99				
	NONSCHEDULED 18			1361							
	ALL SERVICES 13082	16283	13782	262197	898.03	28.63	453.99				
TOTAL FOR 50 U. S. STATES.....											
DOMESTIC--	SCHEDULED 4862407	4976100	4776550	255061763	2302869.75	63491.37	88662.06	217040.05	1213.65		
	NONSCHEDULED 18936			945385		4664.35		12.35	3.00		
	ALL SERVICES 4881343	4976100	4776550	256007148	2307514.08	63 71.39	886674.41	217043.66	1213.65		
INTERNATIONAL--	SCHEDULED 57788	58245	56845	7458571	263266.51	184.70	46726.41	8616.50	231.75		
	NONSCHEDULED 1569			219532		9046.12					
	ALL SERVICES 59357	58245	56845	7617703	272292.63	184.70	46726.41	8616.50	231.75		
TOTAL-----	SCHEDULED 4920149	5034345	4834403	262502034	2566116.24	64198.09	933688.47	229658.36	1447.60		
	NONSCHEDULED 20505			1164517		13698.67		12.35	3.00		
	ALL SERVICES 4940700	5034345	4834403	263564651	2570866.71	64198.09	933700.82	229660.36	1447.60		
OTHER U. S. AREAS.....											
AMERICAN SAMOA.....											
INTERNATIONAL--	SCHEDULED 157	150	148	15407	774.95		36.61				
CAROLINE ISLANDS.....											
INTERNATIONAL--	SCHEDULED 947	976	931	30243	348.97		144.02				
GUAM ISLAND.....											
INTERNATIONAL--	SCHEDULED 1749	1765	1704	155708	2012.94		1399.27	301.99			
	NONSCHEDULED 1										
	ALL SERVICES 1750	1765	1704	155708	2012.94		1399.27	301.99			
JOHNSTON ISLAND.....											
INTERNATIONAL--	SCHEDULED 191	192	190	250	.49		3.79				
MARTHA'S ISLANDS.....											
INTERNATIONAL--	SCHEDULED 1310	1301	1230	69721	120.05		62.47				
MARSHALL ISLANDS.....											
INTERNATIONAL--	SCHEDULED 557	560	535	10076	67.43		34.85				
PUERTO RICO.....											
DOMESTIC--	SCHEDULED 10273	10400	10250	195921	91033.53	167.81	1712.00	1954.76			
	NONSCHEDULED 6			602							
	ALL SERVICES 10303	10400	10250	196026	91073.00	167.81	1712.00	1954.76			
INTERNATIONAL--	SCHEDULED 633	610	608	107068	1265.00		19.41		.02		
	NONSCHEDULED 6										
	ALL SERVICES 651	610	608	107068	1265.00		19.41		.02		

TABLE 4.8
SUMMARY OF AIRCRAFT DEPARTURES, ENPLANED REVENUE PASSENGERS, AND ENPLANED REVENUE TONS OF CARGO AND
MAIL BY TYPE OF OPERATION, BY TYPE OF SERVICE, AND BY STATE AND COUNTRY
12 months ending December 31, 1981

State or Country Type of Operation Type of Service	Aircraft departures			Enplaned Passenger	Enplaned revenue tons				
	Total performed	Scheduled	Scheduled completed		Freight	Express	U.S. Mail		
							Priority	No priority	
PUERTO RICO.....									
TOTAL -----	11008	11018	10858	1652489	52290.43	167.81	1751.41	1954.76	
SCHEDULED	16			845	40.25			.02	
NON SCHEDULED				1653334	52339.68	167.81	1751.41	1954.76	
ALL SERVICES	11024	11018	10858					.02	
VIRGIN ISLANDS, U.S.-----									
DOMESTIC-----	4775	4735	4709	291172	626.35	2.19	265.43	1.21	
SCHEDULED	3			232					
NON SCHEDULED				261404	626.35	2.19	265.43	1.21	
ALL SERVICES	4778	4735	4709						
INTERNATIONAL-----	366	365	364	28955	60.75		66.45		
SCHEDULED									
NON SCHEDULED				28955	60.75		66.45		
ALL SERVICES	366	365	364						
TOTAL -----	5141	5100	5073	290127	687.10	2.19	331.88	1.21	
SCHEDULED	3			232					
NON SCHEDULED				290359	687.10	2.19	331.88	1.21	
ALL SERVICES	5144	5100	5073						
TOTAL FOR OTHER U. S. AREAS....									
DOMESTIC-----	15150	15143	14959	1806593	51659.90	170.00	1877.43	1955.87	
SCHEDULED				1077	40.25				
NON SCHEDULED				1807670	51700.15	170.00	1877.43	1955.87	
ALL SERVICES	15161	15143	14959						
INTERNATIONAL-----	3910	3897	3750	413436	4691.08		1814.87	381.44	
SCHEDULED	9			413436	4691.08		1814.87	381.44	
NON SCHEDULED								.02	
ALL SERVICES	3919	3897	3750						
TOTAL -----	21060	21060	20709	2220029	56350.98	170.00	3797.30	2337.96	
SCHEDULED	20			1077	40.25				
NON SCHEDULED				2221106	56391.23	170.00	3797.30	2337.96	
ALL SERVICES	21080	21060	20709					.02	
FOREIGN COUNTRIES-----									
ARGENTINA-----									
INTERNATIONAL-----	1053	1088	1063	100610	3738.81		28.18	1.60	
SCHEDULED	1			91.81			28.18	1.60	
NON SCHEDULED				100610	3830.62			7.25	
ALL SERVICES	1054	1088	1063					7.25	
AUSTRALIA-----									
INTERNATIONAL-----	1141	1204	1152	131795	7136.35		86.46	.35	
SCHEDULED								161.63	
BAHAMAS-----									
DOMESTIC-----	1								
INTERNATIONAL-----	7980	7860	7602	505643	758.06		2.17		
SCHEDULED				79032				1.82	
NON SCHEDULED				644675	758.06				
ALL SERVICES	8737	7860	7602						
TOTAL -----	7781	7840	7642	565643	758.06		2.17		
SCHEDULED				79032				1.82	
NON SCHEDULED				644675	758.06				
ALL SERVICES	8738	7840	7642						
BAHRAMIN-----									
INTERNATIONAL-----	106	104	104	3836	12.56		.23	22.91	
SCHEDULED								.03	
BARBADOS-----									
INTERNATIONAL-----	1286	1286	1282	74027	327.67		31.93	.05	
SCHEDULED									
BELGIUM-----									
INTERNATIONAL-----	403	409	331	5685	20631.80		38.87	793.46	
SCHEDULED	5			123	122.09			1.23	
NON SCHEDULED				5808	20753.89		38.87	793.46	
ALL SERVICES	408	409	331					1.23	
BERMUDA-----									
INTERNATIONAL-----	3470	3504	3429	410725	403.82	.80	120.73	41.44	
SCHEDULED	25			3341			120.73	57.16	
NON SCHEDULED				414086	403.82	.80			
ALL SERVICES	3495	3504	3429						
BOLIVIA-----									
INTERNATIONAL-----	415	417	415	17055	134.51		2.61	13.01	
SCHEDULED								8.76	
BRAZIL-----									
INTERNATIONAL-----	3235	3231	3156	259236	12656.56		239.66	1.40	
SCHEDULED								208.58	
BRITISH HONDURAS-----									
INTERNATIONAL-----	176	198	168	3690					
SCHEDULED									
BRITISH WEST INDIES-----									
DOMESTIC-----	410	409	433	33853	26.79		.25		
SCHEDULED									
INTERNATIONAL-----	1111	1132	1097	48831	175.09	.36	14.49	3.48	
SCHEDULED									
TOTAL -----	1521	1561	1500	82684	201.88	.36	14.49	3.48	
CANADA-----									
DOMESTIC-----	36683	37219	36527	2699570	7922.47	230.75	782.69	121.82	
SCHEDULED	190			15887					
NON SCHEDULED				2715457	7922.47	230.75	782.69	121.82	
ALL SERVICES	36683	37219	36527						
CHILE-----									
INTERNATIONAL-----	901	915	900	59096	390.77		14.60	.53	
SCHEDULED	1			78					
NON SCHEDULED				59174	390.77		14.60	.53	
ALL SERVICES	902	915	900						
CHINA-----									
INTERNATIONAL-----	197	202	197	12196	443.56		.20	.01	
SCHEDULED									
COLOMBIA-----									
INTERNATIONAL-----	1726	1767	1719	119690	1726.14		5.34	30.67	
SCHEDULED	1			153					
NON SCHEDULED				119843	1726.14		5.34	30.67	
ALL SERVICES	1727	1767	1719						
COSTA RICA-----									
INTERNATIONAL-----	455	468	449	34086	295.75				
SCHEDULED									
COLombIA-----									
INTERNATIONAL-----	1		1						
SCHEDULED									
DENMARK-----									
INTERNATIONAL-----	285	292	285	20443	665.96		3.86	3.99	
SCHEDULED									

TABLE 4.8
**SUMMARY OF AIRCRAFT DEPARTURES, ENPLANED REVENUE PASSENGERS, AND ENPLANED REVENUE TONS OF CARGO AND
 MAIL BY TYPE OF OPERATION, BY TYPE OF SERVICE, AND BY STATE AND COUNTRY**

12 months ending December 31, 1961

State or Country Type of Operation Type of Service	Aircraft departures			Enplaned passenger	Enplaned revenue tons				Foreign mail		
	Total performed	Scheduled	Scheduled completed		Freight	Express	U.S. Mail				
							Priority	Nonspriority			
DOMINICAN REPUBLIC.....											
INTERNATIONAL--SCHEDULED	2216	2176	2103	277334	8438.64		13.79				
NON-SCHEDULED	19			1909							
ALL SERVICES	2235	2176	2103	279443	8438.64		13.79				
ECUADOR.....											
INTERNATIONAL--SCHEDULED	1508	1512	1500	82687	344.40		1.23	.02	36.77		
ARAB REPUBLIC OF EGYPT.....											
INTERNATIONAL--SCHEDULED	351	352	350	57157	281.62		47.90	55.42	13.02		
NON-SCHEDULED	1										
ALL SERVICES	352	352	350	57157	281.62		47.90	55.42	13.02		
FIJI.....											
INTERNATIONAL--SCHEDULED	306	260	260	19791	415.19				14.93		
FRANCE.....											
INTERNATIONAL--SCHEDULED	2332	2336	2199	305676	14975.37		224.80	118.89	1.23		
NON-SCHEDULED	86			999	.25						
ALL SERVICES	2416	2336	2199	306675	14975.62		224.80	118.89	1.23		
FRFNCHE ANTILLES.....											
INTERNATIONAL--SCHEDULED	1142	1139	1132	46339	33.30		2.03	.24			
GERMANY.....											
INTERNATIONAL--SCHEDULED	29234	28527	27942	2669096	44853.12		4439.63	5666.55	9583.58		
NON-SCHEDULED	194			19113	349.41						
ALL SERVICES	29428	28527	27942	2688209	45202.53		4439.63	5666.55	9583.58		
GHANA.....											
INTERNATIONAL--SCHEDULED	52	52	52	4549	129.80				4.91		
GREECE.....											
INTERNATIONAL--SCHEDULED	1250	1258	1261	132414	872.78		200.97	112.67	5.62		
NON-SCHEDULED	1			53							
ALL SERVICES	1251	1258	1261	132467	872.78		200.97	112.67	5.62		
GUATEMALA.....											
INTERNATIONAL--SCHEDULED	1156	1184	1154	90050	5948.82			4.35	188.51		
GUAYANA.....											
INTERNATIONAL--SCHEDULED	28	28	28	2857	12.55						
HAITI.....											
INTERNATIONAL--SCHEDULED	1455	1471	1447	132602	3655.42		44.83	.03			
NON-SCHEDULED	3			139							
ALL SERVICES	1458	1471	1447	132741	3655.42		44.83	.03			
HONDURAS.....											
INTERNATIONAL--SCHEDULED	631	684	593	22373	.19	.06	.01				
NON-SCHEDULED	2			6							
ALL SERVICES	633	684	593	22381	.19	.06	.01				
HONG KONG.....											
INTERNATIONAL--SCHEDULED	2168	2160	2074	277625	31631.62		16.91	476.13	1386.48		
NON-SCHEDULED	6			735.30							
ALL SERVICES	2154	2160	2074	277625	32366.92		16.91	476.13	1386.48		
INDIA.....											
INTERNATIONAL--SCHEDULED	836	860	832	131817	12680.48		.12	43.67	7.01		
NON-SCHEDULED											
ALL SERVICES											
IRELAND.....											
INTERNATIONAL--SCHEDULED	344	355	331	24882	26.64		.31				
NON-SCHEDULED	8			2718							
ALL SERVICES	352	355	331	27600	26.64		.31				
ISRAEL.....											
INTERNATIONAL--SCHEDULED	532	534	529	78949	794.53		67.55	37.16	7.60		
ITALY.....											
INTERNATIONAL--SCHEDULED	1901	1944	1855	295624	15818.07		829.40	231.36	58.96		
NON-SCHEDULED	5			1440							
ALL SERVICES	1906	1944	1855	297064	15818.07		829.40	231.36	58.96		
IVORY COAST.....											
INTERNATIONAL--SCHEDULED	128	135	127	3874	160.05		.37		4.45		
JAMAICA.....											
INTERNATIONAL--SCHEDULED	2696	2766	2677	165745	1066.32		1.11	67.64			
NON-SCHEDULED	45			4530							
ALL SERVICES	2761	2766	2677	170275	1066.32		1.11	67.64			
JAPAN.....											
INTERNATIONAL--SCHEDULED	9135	9206	8873	1091359	102289.52		4605.86	8769.94	764.46		
NON-SCHEDULED	16			363							
ALL SERVICES	9147	9206	8873	1091722	102289.52		4605.86	8769.94	764.46		
KENYA.....											
INTERNATIONAL--SCHEDULED	104	105	104	11264	328.24		24.77		10.57		
LIBERIA.....											
INTERNATIONAL--SCHEDULED	310	314	310	14768	703.07		18.92	.01	21.82		
MALAYSIA.....											
INTERNATIONAL--SCHEDULED	39	39	28		336.41		.31				
MEXICO.....											
DOMESTIC--SCHEDULED	7199	7213	7172	366047	72.23		.10		.02		
NON-SCHEDULED	66			6887							
ALL SERVICES	7283	7213	7172	372934	72.23		.10		.02		
INTERNATIONAL--SCHEDULED	17625	17689	17509	1329938	5902.29		3.67	11.62	.11		
NON-SCHEDULED	18			2391							
ALL SERVICES	17633	17689	17509	1332320	5902.29		3.67	11.62	.11		
TOTAL.....											
SCHEDULED	24854	24898	24681	1695985	5974.92		3.77	11.62	.13		
NON-SCHEDULED	102			9270							
ALL SERVICES	24956	24898	24681	1705263	5974.92		3.77	11.62	.13		

TABLE 4.8
**SUMMARY OF AIRCRAFT DEPARTURES, ENPLANED REVENUE PASSENGERS, AND ENPLANED REVENUE TONS OF CARGO AND
 MAIL BY TYPE OF OPERATION, BY TYPE OF SERVICE, AND BY STATE AND COUNTRY**

12 months ending December 31, 1961

State or Country Type of Operation Type of Service	Aircraft departures			Enplaned passenger	Enplaned revenue tons				
	Total performed	Scheduled	Scheduled completed		Freight	Express	U.S. Mail		
							Priority	NonsPriority	Foreign mail
NETHERLANDS									
INTERNATIONAL--SCHEDULED	146	152	159	8054	6452.53		15.25	21.48	8.13
NON-SCHEDULED	1								
ALL SERVICES	147	152	159	8054	6452.53		15.25	21.48	8.13
NETHERLANDS ANTILLES.....									
INTERNATIONAL--SCHEDULED	3308	3285	3272	105271	190.50	.04	32.47	.70	.63
NON-SCHEDULED	18			2324					
ALL SERVICES	3326	3285	3272	107595	190.50	.04	32.47	.70	.63
NEW ZEALAND.....									
INTERNATIONAL--SCHEDULED	802	813	794	75588	7434.15		26.61	28.65	72.47
NIGERIA.....									
INTERNATIONAL--SCHEDULED	207	209	207	20429	372.73		21.00		
NORWAY.....									
INTERNATIONAL--SCHEDULED	170	173	169	11501	647.65		9.26	3.67	
PAKISTAN.....									
INTERNATIONAL--SCHEDULED	209	208	208	11376	273.51		.18	.69	3.59
PANAMA.....									
INTERNATIONAL--SCHEDULED	2155	2152	2139	149605	1107.16	.01	160.90	254.27	97.25
NON-SCHEDULED	8			904					
ALL SERVICES	2163	2152	2139	150309	1107.16	.01	160.90	254.27	97.25
PARAGUAY.....									
INTERNATIONAL--SCHEDULED	157	157	156	7569	109.61		2.27	5.94	5.00
PERU.....									
INTERNATIONAL--SCHEDULED	1900	1807	1297	103127	797.73		58.73	2.78	44.44
NON-SCHEDULED	1			10					
ALL SERVICES	1901	1807	1297	103137	797.73		58.73	2.78	44.44
PHILIPPINES.....									
INTERNATIONAL--SCHEDULED	752	754	727	154358	3860.60		627.46	2039.81	11.62
POLAND.....									
INTERNATIONAL--SCHEDULED	85	87	83	7762	24.43		18.10		
PORTUGAL.....									
INTERNATIONAL--SCHEDULED	497	501	488	36047	455.63		23.83	5.99	1.98
SAUDI ARABIA.....									
INTERNATIONAL--SCHEDULED	295	289	289	25495	121.56		66.81		3.85
SENEGAL.....									
INTERNATIONAL--SCHEDULED	293	296	289	6423	173.91		.07		13.44
NON-SCHEDULED	3				15.21				
ALL SERVICES	296	296	289	6423	188.52		.07		13.44
SINGAPORE.....									
INTERNATIONAL--SCHEDULED	454	466	393	40780	2103.87		49.46	1.24	84.42
SOUTH AFRICA.....									
INTERNATIONAL--SCHEDULED	43	45	43		89.82		.02	.01	.18
SOUTH KOREA.....									
INTERNATIONAL--SCHEDULED	1002	1062	991	131346	14911.69		561.66	2020.65	19.77
SPAIN.....									
INTERNATIONAL--SCHEDULED	762	792	773	106014	2122.55		255.36	255.75	
SWEDEN.....									
INTERNATIONAL--SCHEDULED	200	205	198	19996	2399.94		6.48	8.35	
SWITZERLAND.....									
INTERNATIONAL--SCHEDULED	633	619	579	26001	8437.04		23.27	29.60	33.44
NON-SCHEDULED	36			3674					
ALL SERVICES	669	619	579	29675	8437.04		23.27	29.60	33.44
TAIWAN.....									
INTERNATIONAL--SCHEDULED	1264	1237	1179	118393	35501.28		185.63	56.70	905.42
THAILAND.....									
INTERNATIONAL--SCHEDULED	408	414	408	40114	1022.23		54.28	130.33	4.54
TRINIDAD & TOBAGO.....									
INTERNATIONAL--SCHEDULED	739	744	736	66026	266.61		1.16		.01
TURKEY.....									
INTERNATIONAL--SCHEDULED	175	173	172	11408	49.85		35.94	8.12	.89
NON-SCHEDULED	31			3705					
ALL SERVICES	206	173	172	15113	49.85		35.94	8.12	.89
EMIRATES.....									
INTERNATIONAL--SCHEDULED	215	219	209		509.98		.03		2.36
UNITED KINGDOM.....									
INTERNATIONAL--SCHEDULED	8123	8450	7881	1404240	52398.36	.91	3169.31	604.65	784.22
NON-SCHEDULED	27			6886	150.93				
ALL SERVICES	8152	8450	7883	1411124	52549.29	.91	3169.31	604.65	784.22
URUGUAY.....									
INTERNATIONAL--SCHEDULED	112	106	102	14159	347.81			14.70	25.67
VENEZUELA.....									
INTERNATIONAL--SCHEDULED	2649	2665	2583	319298	4889.70	.71	36.23	.41	3.56
NON-SCHEDULED	11			1387	2.05				
ALL SERVICES	2660	2665	2583	320685	4891.75	.71	36.23	.41	3.56

TABLE 4.8
**SUMMARY OF AIRCRAFT DEPARTURES, ENPLANED REVENUE PASSENGERS, AND ENPLANED REVENUE TONS OF CARGO AND
 MAIL, BY TYPE OF OPERATION, BY TYPE OF SERVICE, AND BY STATE AND COUNTRY**

State or Country Type of Operation Type of Service	Aircraft departures			Employed passengers	Explained revenue tons					
	Total performed	Scheduled	Scheduled completed		Freight	Express	U.S. Mail		Foreign mail	
							Priority	Nos priority		
TOTAL FOR FOREIGN COUNTRIES----										
DOMESTIC-----										
SCHEDULED	44293	44841	44102	3099670	8021.49	230.85	702.94	121.82	.02	
NON SCHEDULED	264			22774						
ALL SERVICES	44557	44841	44102	3122244	8021.49	230.85	702.94	121.82	.02	
INTERNATIONAL---										
SCHEDULED	128632	128679	125156	12215834	448069.28	7.79	16687.62	21826.77	14493.87	
NON SCHEDULED	1324			135278	1467.05					
ALL SERVICES	129956	128679	125156	12351112	449556.33	7.79	16687.62	21826.77	14493.87	
TOTAL-----										
SCHEDULED	172925	173520	169258	15315304	456110.77	238.64	17470.56	21948.59	14493.89	
NON SCHEDULED	1588			158052	1467.05					
ALL SERVICES	174513	173520	169258	15473356	457577.82	238.64	17470.56	21948.59	14493.89	
OVER-ALL TOTAL FOR ALL STATES, AREAS, AND COUNTRIES-----										
DOMESTIC-----										
SCHEDULED	4921850	5036084	4838619	259967826	2362551.12	64372.24	889722.43	219117.85	1215.67	
NON SCHEDULED	19211			969236	4604.60		12.35	3.80		
ALL SERVICES	4941061	5036084	4838619	260937062	2367235.72	64372.24	889734.78	219121.65	1215.67	
INTERNATIONAL---										
SCHEDULED	192330	192821	187751	20087841	718026.87	194.49	65233.90	30825.25	14725.64	
NON SCHEDULED	2902			356610	10513.17					
ALL SERVICES	195232	192821	187751	20442251	726540.04	194.49	65233.90	30825.25	14725.64	
TOTAL-----										
SCHEDULED	5114180	5228905	5026370	280055667	3078577.99	64566.73	954956.33	249943.11	15961.31	
NON SCHEDULED	22113			1323646	15197.77		12.35	3.80		
ALL SERVICES	5136293	5228905	5026370	281379313	3093775.76	64566.73	954968.68	249946.91	15961.31	

TABLE 4.9
AIRCRAFT DEPARTURES, ENPLANED REVENUE PASSENGERS, AND ENPLANED REVENUE TONS OF CARGO AND
MAIL IN TOTAL OPERATIONS, ALL SERVICES AT LARGE AIR TRAFFIC HUBS
12 months ending December 31, 1981

Community (Airport Name) Percent of Enplanements	Aircraft departure			Enplaned passenger	Enplaned revenue tons				
	Total performed	Scheduled	Scheduled completed		Freight	Express	U.S. Mail		
							Priority	Nonpriority	
ATLANTA, GEORGIA (WILLIAM R HARTSFIELD INT'L) 7.03	256753	261488	255976	18702918	151711.28	11221.12	96459.70	419.58	
BOSTON, MASSACHUSETTS (LOGAN INTERNATIONAL) 2.49	86160	87214	86209	6622905	89182.44	1422.77	22067.84	7801.53	
CHICAGO, ILLINOIS (MIDWAY) 0.19	10771	10966	10768	526967	13.10	.08	1.38		
(ORD/MIDWEEK INTERNATIONAL) 6.15	245692	254857	244105	16379667	339266.64	8963.24	73045.50	29407.02	
COMMUNITY TOTAL	6.36	256463	265913	256873	16906634	339279.74	8963.32	73046.88	
DALLAS-FORT WORTH, TEXAS (LOWE FIELD) 0.93	35569	36612	35553	2481721	.17				
(DALLAS-FT. WORTH REGIONAL) 4.30	172844	176076	173021	11441308	82558.85	1889.12	45128.82	3636.23	
COMMUNITY TOTAL	5.23	208453	212688	208574	13923029	82559.02	1889.12	45128.82	
DENVER, COLORADO (STAPLETON INTERNATIONAL) 3.92	160796	165045	160363	10437142	64170.81	1434.28	33202.61	2785.80	
DETROIT/ANN ARBOR, MICHIGAN (DETROIT CITY) 0.01	1437	1562	1436	27548					
(DETROIT METROPOLITAN WAYNE CITY) 1.77	81157	83125	78121	4722288	39449.20	963.03	21347.78	3785.79	
COMMUNITY TOTAL	1.78	82594	86667	79557	4749836	39449.20	963.03	21347.78	
HONOLULU, OAHU, HAWAII (HONOLULU INTERNATIONAL) 2.04	44922	46278	41322	5442620	83190.23	233.18	14869.26	5283.58	
HOUSTON, TEXAS (HOUSTON INTERCONTINENTAL) 2.01	82851	84382	82197	5369074	39915.67	1024.40	14933.14	1701.83	
(WILLIAM P HARRIS) 0.80	33097	34055	32999	2146685	1698.81	21.98	11.06		
COMMUNITY TOTAL	2.81	115948	118437	115196	7515759	41614.48	1046.38	14944.20	
LAS VEGAS, NEVADA (MC CALLISTER INT'L) 1.59	64271	61815	60700	4232324	3310.20	128.06	3050.49	85.80	
LOS ANGELES/BURBANK/LNG, BCHA/CAL (HOLLYWOOD-BURBANK) 0.35	15102	15240	16849	941356	2508.38	72.18	178.22		
(LONG BEACH) 0.02	877	908	877	56401	11.46				
(LOS ANGELES INTERNATIONAL) 5.11	179595	185164	177798	13595119	286886.84	7052.72	50566.31	15031.51	
(ORANGE COUNTY) 0.44	20748	21575	20508	1176055	1631.47	323.00	.41		
COMMUNITY TOTAL	5.92	216322	222837	214032	15768931	291098.15	7447.90	50744.94	
MIAAMI/FT. LAUDERDALE, FLORIDA (FT. LAUDERDALE-HOLLYWOOD INT'L) 1.01	41366	41409	40307	2694268	10720.75	190.90	3307.76	49.23	
(MIAMI INTERNATIONAL) 2.76	98528	96979	94868	7342907	110455.01	816.01	16713.92	3400.48	
COMMUNITY TOTAL	3.77	137874	138388	135175	10037155	121175.76	1006.91	20021.68	
MINNEAPOLIS/St. Paul, Minnesota (MINNEAPOLIS-ST PAUL INT'L) 1.70	76672	77455	75947	4523898	44809.99	720.38	21684.37	3357.38	
NEWARK, NEW JERSEY (NEWARK) 1.70	62307	64096	61809	4531695	29298.25	1597.76	15388.54	9416.54	
NEW ORLEANS, LOUISIANA (INTERNATIONAL/NOISANT FIELD) 1.10	47878	48623	47626	2928436	8198.60	216.61	6285.27	455.27	
NEW YORK, NEW YORK (JOHN F KENNEDY INT'L) 3.09	77981	79001	76629	8223860	365162.58	2399.87	44671.56	36633.00	
(LA GUARDIA) 3.18	107755	108429	104279	8465101	16650.39	1480.99	25652.83	3109.92	
COMMUNITY TOTAL	6.27	185696	187430	180708	16688961	361812.97	3880.86	70326.39	
ORLANDO, FLORIDA (ORLANDO INT'L) 1.07	51503	51827	50941	2866389	17962.65	319.56	3148.65	816.45	
PHILADELPHIA/PA/CAMDEN, NJ (INTERNATIONAL) 1.34	58890	60602	58431	3582463	32144.31	1010.82	19917.02	11160.32	
PHOENIX, ARIZONA (PHOENIX SKY HARBOR INT'L) 1.27	61720	62629	59974	3397067	12847.62	460.40	6678.19	2622.76	

TABLE 4.9
AIRCRAFT DEPARTURES, ENPLANED REVENUE PASSENGERS, AND ENPLANED REVENUE TONS OF CARGO AND
MAIL IN TOTAL OPERATIONS, ALL SERVICES AT LARGE AIR TRAFFIC HUBS
12 months ending December 31, 1981

Community (Airport Name) Percent of Enplanements	Aircraft departures			Enplaned passenger	Enplaned revenue tons				Foreign mail		
	Total performed	Scheduled	Scheduled completed		Freight	Express	U.S. Mail				
							Priority	Nonpriority			
PITTSBURGH, PA./HEELING W VA (GREATER PITTSBURGH) 1.57	85299	88703	84719	4183339	9450.82	588.26	15479.64	2421.11			
ST. LOUIS, MISSOURI (LAMBERT-ST. LOUIS MUNI) 1.02	93628	96807	92992	5126290	18120.56	398.06	20883.41	4077.76			
SAN FRANCISCO/JAKLAND, CAL. (OAKLAND METROPOLITAN INT'L) 0.33	15250	15384	14943	892152	889.18	11.68	49.86				
(SAN FRANCISCO INT'L) 3.28	108497	110748	107466	8732660	163699.51	3417.89	37577.63	17757.25	21.89		
COMMUNITY TOTAL 3.61	123747	126132	122429	9624812	164588.69	3429.57	37627.49	17757.25	21.89		
SEATTLE/TACOMA, WASHINGTON (BRENT FIELD INT'L) 0.00	61	40	40	3146	1.45	.56	9.25				
(SEATTLE-TACOMA INTERNATIONAL) 1.61	67218	68723	66422	4261971	117048.77	1521.26	22863.47	5353.65	177.88		
COMMUNITY TOTAL 1.61	67279	68763	66482	4285317	117070.22	1521.62	22872.72	5353.65	177.88		
TAMPA/ST. PETERSBURG, FLA. (TAMPA INTERNATIONAL) 1.19	62306	63319	61872	3184121	12947.18	302.97	8518.86	87.17	.80		
WASHINGTON, DIST. OF COLUMBIA (WILMINGTON INT'L) 0.36	13721	13765	13543	959163	7715.96	81.55	4102.67	9897.26			
(WASHINGTON NATIONAL) 2.37	100424	101456	98405	6326655	11011.62	596.85	26983.80	6415.97	.00		
COMMUNITY TOTAL 2.73	114145	115221	111948	7285818	18727.58	678.40	31086.47	16313.23	.00		
OVER-ALL TOTAL, LARGE HUBS 70.00	2721834	2776121	2685535	186548659	2154720.55	50840.82	675170.18	104972.15	1374.69		

Table 4.10
AIRCRAFT DEPARTURES, ENPLANED REVENUE PASSENGERS, AND ENPLANED REVENUE TONS OF CARGO AND
MAIL IN TOTAL OPERATIONS, ALL SERVICES AT MEDIUM AIR TRAFFIC HUBS
12 months ending December 31, 1961

Community (Airport Name) Percent of Enplanements	Aircraft departures			Enplaned passengers	Enplaned revenue tons				
	Total performed	Scheduled	Scheduled completed		Freight	Express	U.S. Mail		
							Priority	Nonpriority	
ALBUQUERQUE, NEW MEXICO (ALBUQUERQUE SUNPORT/KIERTLAND AFB) 0.35	21483	22181	21377	932048	1771.37	23.65	3057.31	496.65	
ANCHORAGE, ALASKA (ANCHORAGE INTERNATIONAL) 0.36	23750	21074	20317	958377	136390.55	2437.01	12576.33	21209.49	
AUSTIN, TEXAS (ROBERT MUELLER MUNI) 0.36	18321	18733	18227	973399	1284.21	28.88	1702.40	2.16	
BALTIMORE, MARYLAND (BALTO/WASH INTL) 0.57	32710	33581	32317	1521983	13006.51	362.99	7749.79	3237.75	
BUFFALO/NIAGARA FALLS, NEW YORK (GREATER BUFFALO INTERNATIONAL) 0.50	31306	31998	31389	1333165	6010.75	241.60	4646.93	1169.15	
CHARLOTTE, NORTH CAROLINA (CHARLOTTE MUNI) 0.71	40572	40916	40406	1894928	12365.67	686.24	8101.83	35.14	
CINCINNATI, OHIO (GREATER CINCINNATI) 0.50	34264	35028	34070	1331791	7409.16	190.58	5628.75	881.19	
CLEVELAND, OHIO (FRIRKE LAKEFRONT) 0.01	2238	2377	2234	36301					
(HOPKINS INTERNATIONAL) 0.98	49240	50395	48921	2619705	20497.49	1393.53	10248.43	692.66	
COMMUNITY TOTAL	0.99	51478	52772	51155	2656006	20497.49	1393.53	10248.43	
COLUMBUS, OHIO (PORT COLUMBUS INTERNATIONAL) 0.42	22827	23585	22679	1121737	2890.71	159.47	4199.46	546.89	
DAYTON, OHIO (JAMES M COX DAYTON MUNI) 0.26	17033	17833	16968	707426	2981.63	141.92	2754.90	9.15	
EL PASO, TEXAS (EL PASO INTERNATIONAL) 0.36	17186	17284	17133	965953	6142.30	83.49	1660.50	4.56	
GREENSBORO/HIGH PT/WINSTON, N.C. (GREENSBORO-HIGH PT-WINSTON REG.) 0.77	19683	20030	19617	726767	2390.62	312.61	3156.99	11.60	
(SMITH-REYNOLDS) 0.01	2841	2569	2489	30033	90.33	.01	1.50		
COMMUNITY TOTAL	0.28	22524	22599	22106	756800	2480.95	312.62	3158.49	
HARTFORD/CT/SPG/DE/WESTFLO/MASS (BRADLEY INTL)	0.43	25117	25566	24917	1162993	10712.55	297.14	7292.90	
INDIANAPOLIS, INDIANA (INDIANAPOLIS MUNI/MER-COOK) 0.47	20995	30998	29814	1257385	7111.41	378.13	8321.62	979.27	
JACKSONVILLE, FLORIDA (JACKSONVILLE INTERNATIONAL) 0.32	16577	16802	15437	858902	1700.07	129.22	5069.89	7.12	
KAHULU, MAUI, HAWAII (KAHULU) 0.68	17528	18225	15104	1283134	1543.86		586.93	353.76	
KANSAS CITY, MISSOURI (INTERNATIONAL) 0.84	50213	51225	49763	2254256	7209.21	202.53	13876.34	515.97	
KANSAS CITY MUNI 0.00	3659	3903	3646	18087	49.00	12.42	.06		
COMMUNITY TOTAL	0.84	53872	55128	53409	2272343	7258.21	214.95	13876.40	
LEIHIWA, KAHALA, HAWAII (LEIHIWA) 0.33	10705	11205	9333	900632	654.38		292.97	178.10	
LOUISVILLE, KENTUCKY (STANDEIFORD FIELD) 0.31	22647	23048	22538	848186	2914.05	175.08	4754.85	15.23	
MEMPHIS, TENNESSEE (MEMPHIS INTERNATIONAL) 0.73	50377	50791	50186	1945933	9349.81	330.37	11159.55	12.99	
MILWAUKEE, WISCONSIN (GENERAL MITCHELL FIELD) 0.58	39289	40763	38886	1550847	5357.61	131.42	7493.30	70.69	
NASHVILLE, TENNESSEE (METROPOLITAN) 0.38	25943	26135	25771	1033206	6194.55	300.37	4097.10	367.45	
NORFOLK/V.A. (NRP/PSM/CHESPEKE, VA (NORFOLK REGIONAL) 0.41	21219	21684	21106	1099872	1180.00	137.19	1333.16	6.97	
OKLAHOMA CITY, OKLAHOMA (TULI ROGERS MUNI) 0.42	18847	19164	18707	1118403	2033.08	89.69	4829.01	365.96	

Table 4.10
AIRCRAFT DEPARTURES, ENPLANED REVENUE PASSENGERS, AND ENPLANED REVENUE TONS OF CARGO AND
MAIL IN TOTAL OPERATIONS, ALL SERVICES AT MEDIUM AIR TRAFFIC HUBS
12 months ending December 31, 1981

Community (Airport Name) Percent of Enplanements	Aircraft departures			Enplaned passenger	Enplaned revenue tons					
	Total performed	Scheduled	Scheduled completed		Freight	Express	U.S. Mail		Foreign mail	
							Priority	Nospriority		
OMAHA, NEBRASKA (EPPLEY AIRFIELD) 0.29	18360	18738	18137	782933	2004.79	93.28	7126.71	28.72		
ONTARIO/SAN BERNARD/RIVERVERSE, CA (ONTARIO INTERNATIONAL) 0.32	21075	24242	20756	871424	1075.52	92.32	10.63	30.89		
PORTLAND, OREGON (PORTLAND INTERNATIONAL) 0.65	33247	34066	32939	1731302	18016.52	239.24	6087.44	1426.36		
RALEIGH/DURHAM, NORTH CAROLINA (RAF FIGH-DURHAM) 0.31	21166	21652	21047	628176	2512.67	330.97	3238.19	28.05		
RENO, NEVADA (RFND INTL) 0.42	20979	21486	20807	1119711	1083.76	86.83	1753.94	1.83		
ROCHESTER, NEW YORK (ROCHESTER-MONROE COUNTY) 0.27	19758	20289	19658	736282	1708.16	89.50	2177.90	46.27		
SACRAMENTO, CALIFORNIA (SACRAMENTO METROPOLITAN) 0.40	19361	19797	19226	1080347	1408.89	132.33	6523.05	153.35		
SALT LAKE CITY, UTAH (SALT LAKE CITY INTL) 0.71	39678	40227	39465	1902459	8156.35	301.51	7092.44	515.44		
SAN ANTONIO, TEXAS (SAN ANTONIO INTERNATIONAL) 0.61	25600	25959	25380	1626755	4684.06	154.22	4405.94	67.21		
SAN DIEGO, CALIFORNIA (SAN DIEGO INTL-LINDBERGH FL) 0.94	42580	46580	42273	2525428	10303.86	230.36	6076.29	47.28		
SAN JOSE, CALIFORNIA (SAN JOSE MUNI) 0.51	26007	26616	25756	1370724	3620.34	170.26	1516.93	1.06		
SAN JUAN, PUERTO RICO (SJERIN RIC) INTERNATIONAL) 0.62	11024	11018	10858	1653334	52339.68	167.81	1731.41	1954.76	.02	
SYRACUSE, NEW YORK (CLARENCE F HAWCOCK) 0.26	22673	23276	22551	717589	1903.71	81.69	1459.49	30.61		
TUCSON, ARIZONA (TUCSON INTL) 0.30	17137	17680	16665	821265	2248.87	216.14	1708.94	65.71		
FULTON, OKLAHOMA (TULSA INTL) 0.41	21327	21819	21250	1112368	3023.19	65.03	4385.58	623.24		
WEST PALM BEACH/PALM BEACH, FLA (PALM BEACH INTERNATIONAL) 0.47	24732	25125	24535	1263192	2116.87	58.01	1449.27	16.73		
OVER-ALL TOTAL, MEDIUM HUBS 18.85	1050274	1075663	1035333	50628736	303448.50	10754.84	191333.03	37703.56	72.65	

TABLE 4.11
**AIRCRAFT DEPARTURES, ENPLANED REVENUE PASSENGERS, AND ENPLANED REVENUE TONS OF CARGO AND
 MAIL IN TOTAL OPERATIONS. ALL SERVICES AT SMALL AIR TRAFFIC HUBS**
 12 months ending December 31, 1981

Community (Airport Name) Percent of Enplanements	Aircraft departures			Enplaned passenger	Enplaned revenue tons					
	Total performed	Scheduled	Scheduled completed		Freight	Express	U.S. Mail		Foreign mail	
							Priority	NoPriority		
ALBANY, NEW YORK (ALBANY COUNTY)	0.15	13953	14425	13930	414205	865.08	20.82	1935.24	3.32	
ALLENTOWN/BETHLEHEM/EASTON, PA (ALLENTOWN-BETHLEHEM-EASTON)	0.05	5061	5348	5042	152033	427.19	16.32	126.82	2.38	
AMARILLO/BORGER, TEXAS (AMARILLO AIR TERMINAL)	0.13	7871	8160	7835	362210	326.43	2.39	780.63	4.05	
ASHVILLE, NORTH CAROLINA (ASHVILLE MUNI)	0.05	5841	5933	5812	154895	285.42	25.95	249.10		
AUGUSTA, GEORGIA (FRITH FIELD)	0.05	2810	2859	2788	156522	372.18	57.05	113.24		
BATON ROUGE, LOUISIANA (IRVAN)	0.10	7456	7607	7414	267790	402.14	29.28	137.80	1.40	
BELITTS, MONTANA (LOGAN FIELD)	0.11	11735	11976	11570	309382	691.47	13.24	1021.84	7.51	
BIRMINGHAM, ALABAMA (BIRMINGHAM MUNI)	0.24	17970	18136	17788	643513	1921.91	173.07	2982.33	18.92	
BISMARCK/MANDAN, NORTH DAKOTA (BISMARCK MUNI)	0.05	7160	7445	7095	147028	356.56	4.96	282.68	1.23	
BOISE, IDAHO (BOISE AIR TERMINAL/GOWEN FLD)	0.15	13857	14159	13656	411735	804.83	53.27	1713.83	8.73	
BRISTOL/KNGSPRT/JHNNS CTV, TENN (TRI CITY)	0.06	6817	6905	5785	173326	647.08	77.17	377.45		
BRUNSWICK/FMLGN/SAN BNID, TEX (CHARLINGEN INDUSTRIAL AIRPARK)	0.12	4485	4526	4477	333616	39.80	17.55	.01	.43	
CAHOON GRANDE VALLEY INTL.	0.0	905	916	893	62367	163.22	22.04	8.01		
COMMUNITY TOTAL	0.14	5390	5642	5370	395983	203.02	39.59	8.02	.43	
WIRINGTON, VERMONT (WIRINGTON INTERNATIONAL)	0.06	7125	7372	7098	169841	497.34	6.25	118.73		
CEDAR RAPIDS/IDHA CITY, IOWA (CEDAR RAPIDS MUNI)	0.07	9314	9784	9243	203925	600.33	16.09	552.99	14.10	
CHARLESTON, SOUTH CAROLINA (CHARLESTON AFRAZMUNI)	0.16	8498	8585	8429	432220	773.26	51.67	871.45	18.66	
CHARLESTON/DUNBAR, W. VIRGINIA (KANAWHA)	0.07	7361	7542	7329	208057	190.52	16.17	392.10		
CHATTANOOGA, TENNESSEE (LOWELL FIELD)	0.07	4765	4794	4717	212086	505.81	60.63	715.43		
CHRISTIANSTED-ST. CROIX-U.S. V.I. (M. EXANDER HAMILTON)	0.07	3165	3135	3126	197915	582.57	.59	234.80	.92	
COLORADO SPRINGS, COLORADO (PETERSON FIELD)	0.08	5915	5970	5714	223945	530.09	12.88	9.13		
COLUMBIA, SOUTH CAROLINA (COLUMBIA METROPOLITAN)	0.14	8417	8569	8377	389814	895.64	138.77	1585.18	3.52	
CORPUS CHRISTI, TEXAS (CORPUS CHRISTI INTERNATIONAL)	0.14	6143	6226	5115	393053	597.94	11.10	47.16	.17	
DAYTONA BEACH, FLORIDA (DAYTONA BEACH REGIONAL)	0.10	6275	6387	6264	286696	480.01	15.22	4.34	.28	
DES MOINES, IOWA (DES MOINES MUNI)	0.20	13593	14068	13345	538644	1346.17	37.11	5092.91	23.35	
EUGENE, OREGON (MARION SWIFT FIELD)	0.06	4584	4727	4558	1R0321	253.92	17.85	619.75	.02	
EVANSVILLE, INDIANA (EVANSVILLE DRESS REGIONAL)	0.09	3846	3968	3833	156940	761.91	46.01	127.35	14.97	
FAIRBANKS, ALASKA (FAIRBANKS INTERNATIONAL)	0.08	12832	12055	11635	239195	8482.38	48.93	1743.94	2855.98	
FARGO, N.D./MOORHEAD, MINNESOTA (MORTON FIELD)	0.05	5449	5499	5410	149976	247.97	.64	769.12	2.40	

TABLE 4.11
AIRCRAFT DEPARTURES, ENPLANED REVENUE PASSENGERS, AND ENPLANED REVENUE TONS OF CARGO AND
MAIL IN TOTAL OPERATIONS: ALL SERVICES AT SMALL AIR TRAFFIC HUBS
12 months ending December 31, 1981

Community (Airport Name) Percent of Enplanements	Aircraft departures			Enplaned passenger	Enplaned revenue tons				
	Total performed	Scheduled	Scheduled completed		Freight	Express	U.S. Mail		
							Priority	NoPriority	
FORT MYERS, FLORIDA (PAGE FIELD)	0.20	10938	11181	10552	532612	1040.85	40.60	99.31	3.88
FORT WAYNE, INDIANA (MUNICIPAL/BABE FIELD)	0.07	11509	11890	11473	199551	336.21	71.07	262.77	
FRESNO, CALIFORNIA (FRESHNO AIR TERMINAL)	0.12	11228	11801	11160	327423	403.01	29.02	904.29	
GAINESVILLE, FLORIDA (GAINESVILLE MUNI)	0.05	2974	2977	2966	158908	161.39	13.50	9.27	.55
GRAND JUNCTION, COLORADO (WALKER FIELD)	0.05	2802	2826	2737	140027	249.77	3.82	23.93	
GRAND RAPIDS, MICHIGAN (KENT COUNTY)	0.12	8501	8694	8371	332870	674.31	27.69	545.35	
GREEN BAY/CLINTONVILLE, WIS. (AUSTIN-STRAUBEL FIELD)	0.09	8329	8372	8182	243000	908.81	4.37	114.33	
GREENVILLE/ESPARTANBURG, S.C. (GREENVILLE-SPARTANBURG)	0.10	5413	5467	5338	282762	614.27	156.59	1207.92	.81
AGANA NAS, GUAM ISLAND (AGANA FIELD)	0.05	1750	1745	1704	155708	2012.96		1399.27	581.99
HARRISBURG/YORK, PA. (HARRISBURG INTERNATIONAL)	0.07	3485	3595	3443	200711	531.69	4.45	209.74	.35
HELENA, HAWAII, HAWAII (GENERAL LYMAN FIELD)	0.17	6114	6272	5544	455590	4797.25	2.20	787.29	334.68
HUNTSVILLE/FEDERAL, ALABAMA (HUNTSVILLE JETPORT)	0.08	6820	6839	6775	213390	589.72	12.09	163.47	
INDIO/PALM SPRINGS, CALIFORNIA (PALM SPRINGS MUNI)	0.06	3489	3492	3464	176933	143.46	3.74	1.09	
JACKSON-VICKSBURG, MISS. (MILLEN C. THOMPSON FIELD)	0.12	8472	8612	8458	330111	1481.82	21.19	1500.27	
JUNEAU, ALASKA (JUNEAU MUNI)	0.05	3892	3893	3701	156453	1268.41		665.63	193.01
KAIKIA-KONA, HAWAII, HAWAII (KIAKIA-KONA)	0.17	6650	6903	5987	473253	998.77		230.75	129.25
KNOXVILLE, TENNESSEE (MC GHEE TYSON)	0.13	8301	8417	8218	364338	1191.52	75.33	1618.41	1.32
LEXINGTON/FRANKFORT, KENTUCKY (LNU OF GRASSI)	0.10	6429	6476	5393	284523	905.44	82.44	1325.57	
LINCOLN, NEBRASKA (LINCOLN MUNI)	0.05	6210	6492	5134	135059	185.84	34.80	502.55	
LITTLE ROCK, ARKANSAS (ADAMS FIELD)	0.17	10096	10257	10058	455199	1313.96	71.88	1964.22	.08
LURROCK, TEXAS (LURROCK REGIONAL)	0.18	9856	10108	9512	491017	647.83	3.98	254.05	1.14
MADISON, WISCONSIN (TRIAX FIELD)	0.10	8966	9155	8838	275683	731.66	2.21	411.24	
MARSHALL, FLORIDA (CAPE KENNEDY REGIONAL)	0.05	3209	3321	3196	148997	263.48	37.27	.03	
MIDLAND/DESSAU, TEXAS (MIDLAND REGIONAL)	0.21	8840	8939	8795	582024	873.84	14.15	545.33	.68
MISIÓN/NAZARETH/EDINBURG, TEXAS (MILLER INTERNATIONAL)	0.06	2808	2845	2795	168226	229.71	1.15	17.67	.06
MONTGOMERY, ALABAMA (MONTGOMERY FIELD)	0.10	8101	8225	8046	269857	274.94	74.98	370.47	.45
MOLINE, ILLINOIS/DAVENPORT, IOWA (QUAD-CITIES)	0.08	10103	10111	9844	231368	252.40	7.08	302.56	20.21
MONTGOMERY, ALABAMA (MONTGOMERY FIELD)	0.06	3095	3035	3078	169383	599.16	42.89	224.59	

TABLE 4.11
AIRCRAFT DEPARTURES, ENPLANED REVENUE PASSENGERS, AND ENPLANED REVENUE TONS OF CARGO AND
MAIL IN TOTAL OPERATIONS. ALL SERVICES AT SMALL AIR TRAFFIC HUBS
12 months ending December 31, 1987

Community (Airport Name) Percent of Enplanements	Aircraft departures			Enplaned passenger	Enplaned revenue tons				Foreign mail		
	Total performed	Scheduled	Scheduled completed		Freight	Express	U.S. Mail				
							Priority	Nonpriority			
PENSACOLA, FLORIDA (PENSACOLA REGIONAL) 0.07	4393	4501	4388	208555	747.11	56.39	681.33	3.62			
PEORIA, ILLINOIS (GREATER PEORIA) 0.06	6924	7256	6854	161524	626.70	.28	327.46	17.75			
PORTLAND, MAINE (PORTLAND INTERNATIONAL JETPORT) 0.08	4193	4328	4107	219166	1147.68	28.79	200.70				
PROVIDENCE, RHODE ISLAND (THOMAS FRANCIS GREEN STATE) 0.12	8205	8534	8162	319354	803.79	34.94	1345.80	1.02			
RICHMOND, VIRGINIA (RICHARD E BYRD FLYING FIELD) 0.21	17243	17565	17138	565832	1094.64	18.09	1001.07	1.06			
ROANOKE, VIRGINIA (ROANOKE MUNI) 0.12	12225	12547	12197	334774	873.37	4.35	236.11				
SAGINAW/RAY CITY/MIDLAND, MICH. (TRI CITY) 0.05	3825	3967	3783	141595	236.36	7.89	32.29				
SALINAS/MONTEREY, CALIFORNIA (PENINSULA) 0.07	5835	6062	5809	191866	148.62	29.93	10.81				
SANTA BARBARA, CALIFORNIA (SANTA BARBARA) 0.05	6303	6608	5270	158981	110.08	33.36	1.50				
SANTA MARTA PUBLIC 0.00	1666	1702	1566	21502	6.30						
COMMUNITY TOTAL 0.05	7969	8310	7936	180483	116.38	33.36	1.50				
SARASOTA/BRADENTON, FLORIDA (SARASOTA-BRADENTON) 0.19	10881	11083	10799	514169	665.27	42.60	6.85	.68	.06		
SAVANNAH, GEORGIA (SAVANNAH MUNI) 0.23	6192	6271	6183	349775	378.53	21.73	182.34	1.23			
SHREVEPORT, LOUISIANA (GREATER SHREVEPORT MUNI) 0.14	9643	9793	9629	380023	1355.14	56.60	905.24				
SIoux FALLS, SOUTH DAKOTA (JOE FOSSE FIELD) 0.06	8770	9009	8639	171754	675.07	18.52	1195.98	1.75			
SPokane, Washington (SPOKANE INTERNATIONAL) 0.24	18339	18917	18239	660628	2578.25	55.63	2041.23	9.86			
TALLAHASSEE, FLORIDA (TALLAHASSEE MUNI) 0.10	7505	7591	7457	278520	561.34	34.07	525.50	103.52			
TOLEDO, OHIO (TOLEDO EXPRESS) 0.08	8875	9288	8828	222837	268.21	22.18	678.61	.04			
WICHITA, KANSAS (WICHITA MUNI) 0.19	15716	16470	15635	509494	1890.74	30.24	2728.29	6.19			
OVER-ALL TOTAL: SMALL HUBS 7.50	559116	571394	552278	20931895	61858.41	2320.90	51175.84	4202.05	.08		

COMMUTERS

The commuter air carrier data were obtained from Commuter Air Carrier submissions of CAB Form 41, Schedule T-1(a) or CAB Form 298-C, Schedules A-1 and T-1. These data were published in the AIR CARRIER TRAFFIC INDUSTRY SCHEDULED SERVICE TRAFFIC STATISTICS by the Civil Aeronautics Board (CAB).

Data in this section of Chapter IV include passenger miles flown, tons of mail and cargo carried, annual counts of passenger markets and the number of commuters that carry passengers, and passenger destinations by state of origin. A market is service between two cities.

Commuter carriers reporting activities performed in scheduled service to CAB are not necessarily the same carriers reporting multiengine aircraft data to FAA as indicated in the tables in Chapter V of this publication.

TABLE 4.12
COMMUTER AIR CARRIERS
AS OF DECEMBER 31, 1981

AAA - Air Enterprises, Inc.	Amistad Airlines
AAA - Action Air Carrier, Inc.	Antilles Air Boats, Inc.
Aero Virgin Island Corp.	Apollo Airways, Inc.
Aeromech, Inc.	Arizona Aero Corp.
Aerotransit, Inc.	Arizona Pacific, Inc.
Air Atlantic Airlines, Inc.	Asap Air, Inc.
Air Bahia	Aztec Air East, Inc.
Air Cargo America, Inc.	Atlantic Air
Air Cargo Enterprises, Inc.	Atlantic Southeast Airlines
Air Cargo Express, Inc.	Atlantis Airlines, Inc.
Air Carolina	Bahama Caribbean Airlines
Air Central, Inc.	Bankair, Inc.
Air Chaparral, Inc.	Bar Harbor Airways
Air Chico	Bard-Air Corp.
Air Colorado	BASS Air
Air Express, Inc.	Bellair
Air Illinois	Bemidji Airlines
Air Kentucky Air Lines	Bennington Aviation, Inc.
Air Miami, Inc.	Beyer Aviation
Air Nebraska, Inc.	Big Sky Airlines, Inc.
Air Nevada Airlines, Inc.	Bighorn Airways, Inc.
Air New Mexico	Birchwood Air Service
Air North/Nenana	Blackhawk Airways, Inc.
Air North, Inc.	Boise Air Service
Air Oregon	Brennan and Hargreaves, Inc.
Air Pennsylvania	Britt Airlines, Inc.
Air Polynesia Inc.	Burlington Airways
Air South	Business Aircraft Corp.
Air Trails, Inc.	C and M American Aviation
Air, U.S.	Cape Smythe Air Service
Air Vectors Airways	Capitol Airlines
Air Vermont, Inc.	Caribbean Air Services, Inc.
Air Virginia	Catalina Airlines, Inc.
Air-Lift Associates, Inc.	Catalina/Vegas Airlines
Airline Holdings, Inc.	Catskill Airways, Inc.
Airpac Airlines, Inc.	Cen-Tex Airlines, Inc.
Airways of New Mexico, Inc.	Centennial Airlines
Alamo Commuter Airlines	Central States Airline
Alaska Aeronautical Indust.	Century Airlines
Alaska Central Airways, Inc.	Century Airlines (California)
All Seasons Air Pacific	Chalks Int'l Airlines, Inc.
Altus Airlines	Chandler Flyer
American Flag Airlines, Inc.	Channel Flying, Inc.
American Inter-Island, Inc.	Chaparral Airlines, Inc.

TABLE 4.12 (Continued)

COMMUTER AIR CARRIERS
AS OF DECEMBER 31, 1981

Charlie Hammonds Flying Serv.	Evanston Aviation
Chautauqua Airlines, Inc.	Executive Aviation, Inc.
Choi Aviation, Inc.	Far West Airlines
Christman Air System	Flamenco Airways, Inc.
Clinton Aero Corp.	Florida Airlines, Inc.
Cochise Airlines, Inc.	Ford-Aire, Inc.
Coker Aviation, Inc.	Freedom Air
Coleman Air Transport	Freedom Airlines, Inc.
Colgan Airways, Inc.	Galion Commuter Service
Comair, Inc.	General Aviation, Inc.
Command Airways, Inc.	Go Flying, Inc. & Copper Stat.
Commuter Airlines	Golden Carriage Aire
Cook Inlet Aviation	Great American Airways
Coral Air, Inc.	Great Plains Airlines, Inc.
Corporate Air, Inc.	Green Hills Aviation, Ltd.
Cosmopolitan Commuter Airline	Green Mountain Airlines, Ltd.
Crawford Aviation, Inc.	Grognet Flying Service
Crested Butte Air Service	Gromer Aviation, Inc.
Crown Airways, Inc.	Gull Air, Inc.
Crown Aviation, Inc.	Gunnel Aviation, Inc.
Cumberland Airlines	Guy-America Airways, Inc.
Danbury Airlines	Harbor Airlines, Inc.
Dauphin Island Airways	Havasu Airlines
Decatur Aviation	Hawking Corporation
Desert Airlines	Henson Aviation, Inc.
Desert Pacific Airlines, Inc.	Heussler Air Service Corp.
Devoe Airlines	Holiday Airlines, Inc.
DHL Airlines, Inc.	Horizon Airlines
Dickman Aviation Services	Hyannis Aviation
Direct Air, Inc.	IDEE Industries, Inc.
Dolphin Airways, Inc.	Iliamna Air Taxi
Dorado Wings, Inc.	Imperial Airlines, Inc.
Downeast Airlines, Inc.	Indo-Pacific International
E.J.A. Newport, Inc.	Inland Empire Airlines, Inc.
Eagle Airlines	Island Airlines
Eagle Commuter Airlines, Inc.	Island Airlines Hawaii, Inc.
East Hampton Aire, Inc.	Island Aviation, Inc.
Eastern Caribbean Airways	Jamaire, Inc.
Eastern Carolina Aviation	Jer-Don Air
EDE Aire	Kingman Aviation
Emerald Airlines	Kodiak Airways, Inc.
Empire Aero Services	L.A.B. Flying Service
Erie Airways, Inc.	Lake State Airways

TABLE 4.12 (Continued)

COMMUTER AIR CARRIERS
AS OF DECEMBER 31, 1981

Lakeland Aviation	Phillips Airlines
Las Vegas Airlines	Phoenix Airlines
Lawrence Aviation	Piasa Commuter Airlines
Mackey Int'l, Inc.	Pioneer Airways
Magum Airlines	Planes, Inc.
Mall Airways, Inc.	Pocono Airlines, Inc.
Marco Island Airways, Inc.	Polar Airways, Inc.
Marshall's Air, Inc.	Pompano Airways
Maxair, Inc.	Ponderosa Aviation, Inc.
Mesaba Aviation	Precision Valley Aviation
Metroflight Airlines	Princeton Aviation Corp.
Metroplex Airlines	Princeville Airways, Inc.
Mid Pacific Airlines, Inc.	Pro Air Services
Mid-South Aviation, Inc.	Providence Airline Corp.
Midstate Airlines, Inc.	Provincetown-Boston Airline
Midway Aviation, Inc.	Puerto Rico Int'l Airlines
Midwest Aviation (MV)	Ransome Airlines
Montauk Caribbean Airways	Realwest Airlines
Mountain Home Air Service	Red Carpet Airlines, Inc.
Mountainwest Airlines	Richardson Aviation
Munz Northern Airlines, Inc.	Rio Airways, Inc.
Nevada Airlines	Riverside Air Service
New England Airlines, Inc.	Robert J. Smith (Emmet County)
New York Helicopter Corp.	Roederer Aviation Inc.
Newair Flight, Inc.	Ross Aviation, Inc.
Nor East Commuter Airlines	Royal American Airways, Inc.
Northaire	Royal Hawaiian Airways, Inc.
Northern Eagle Airways, Inc.	Royal-Air, Ltd.
Ocean Airways, Inc.	Royale Airlines, Inc.
Ocean Reef Airways, Inc.	S.E. Alaska Airlines
Offshore Logistics	Saber Aviation, Inc.
Omaha Aviation	Sajen Air, Inc.
Omak Aviation Airlines	Samoan Airlines, Inc.
Orion Air, Inc.	San Juan Airlines, Inc.
P.S. Air Freight, Inc.	Scenic Airlines, Inc.
Pacific CAL AIR	Scheduled Skyways
Pacific National Airways	Schlick Air Service, Inc.
Pearson Aircraft	Sea Airmotive
Pee Dee Air Express, Inc.	Sedalia, Marshall, Boonville
Peninsula Airways, Inc.	Stage Line
Pennsylvania Airlines	Semo Aviation, Inc.
Permian Airways, Inc.	Shasta Air, Inc.
	Shavano Air, Inc.

TABLE 4.12 (Continued)

COMMUTER AIR CARRIERS
AS OF DECEMBER 31, 1981

Sierra Express, Inc.	Trans California Airlines
Silver State Airlines	Trans Catalina Airlines
Simmons Airlines	Trans Commuter Airlines
Sky West Aviation, Inc.	Trans Island Airways, Inc.
Skycraft, Inc.	Trans Mo Airlines
Skyline Airlines	Trans New York
Sky Train	Trans Sierra Airlines, Inc.
Slocum Air, Inc.	Trans Western Airlines of Utah
Soonair Lines, Inc.	Trans-Central Airlines, Inc.
South Central Air, Inc.	Trans-Colorado Airlines
South Coast Airways	Trans-National Airlines HAW
South Pacific Island Airway	Transtate Aviation
Southeast Skyways, Inc.	Tri-State Flite Service, Inc.
Southeastern Commuter	Tyee Airlines
Southern Airlines, Inc.	Universal Airways, Inc.
Southern Jersey Airways	Vacational Aviation, Inc.
Southern Seaplane	Vagabond Aviation, Inc.
Springfield Air Service	Valdez Airlines
Stahmannfarms, Inc.	Vale International Airlines
Starflight Int'l Airlines	Valley Airlines
Stabe Airlines, Inc.	VEE Neal Airlines
Sterling Air Service	Vieques Air Link, Inc.
Suburban Airlines	Virgin Air, Inc.
Sun Aire Lines	Walker's Cay Airlines
Sun International Airways	Westair Commuter Airlines
Sunbird Airlines, Inc.	Western Charter Inc.
Sunbird, Inc.	Western Star Airlines
Sunwest Airlines	Western Yukon Air
Swift Aire Lines	Wheeler Flying Service
T-Bird Air Travel, Inc.	Will's Air
Tejas Airlines, Inc.	Wings Airways
Tennessee Airways, Inc.	Wings West
Terre Haute Air Commuter	Wright Air Lines, Inc.
Thorson Aviation	Yosemite Airlines, Inc.
Trans Air Cargo, Inc.	Young Flying Service
	40-Mile Air

Source: "Air Carrier Industry Scheduled Service Traffic Statistics,"
12/31/81, Civil Aeronautics Board

TABLE 4.13
COMMUTER AIR CARRIER REPORTING TO CAB
SCHEDULED PASSENGER TRAFFIC, DECEMBER 31, 1972 - 1981

YEAR	O&D PASSENGERS (000)	PASSENGER MILES (000)	CARGO (LBS) (000)	MAIL (LBS) (000)	AIRPORTS SERVED	PASSENGER MARKETS	TOTAL MARKETS	COMMUTER CARRYING PASSENGERS	COMMUTER CARRYING CARGO	COMMUTER CARRYING MAIL	COMMUTER CARRIERS REPORTING
1972	5,262	528,144	74,573	126,177	643	1,304	*	143	*	*	184
1973	5,688	575,810	92,963	147,796	684	1,244	1,751	159	167	78	216
1974	6,842	708,709	138,279	156,293	736	1,351	1,971	158	165	81	213
1975	6,666	698,473	169,203	164,682	747	1,388	2,027	165	175	90	235
1976	7,305	770,784	216,811	108,597	781	1,412	2,090	174	183	102	252
1977	8,505	946,179	271,242	71,395	764	1,594	2,258	179	171	77	242
1978	10,074	1,116,931	401,638	40,122	819	1,676	2,393	208	189	59	258
1979	11,054	1,324,267	182,613	13,341	824	2,105	2,450	227	174	49	257
1980	10,865	1,300,404	190,279	16,101	816	2,087	2,502	240	193	66	286
1981	**	**	**	**	**	**	**	**	**	**	**

* NO FIGURES AVAILABLE.

SOURCE: "COMMUTER AIR CARRIER TRAFFIC STATISTICS," 12/31/80, CIVIL AERONAUTICS BOARD

NOTE: "MARKETS" MEANS SERVICE BETWEEN TWO POINTS.

** DATA NO LONGER AVAILABLE THROUGH CAB; SEE EXPLANATION OF CAB CHANGES IN THE INTRODUCTORY PAGE TO THIS SECTION OF THE CHAPTER.
SEE ALSO TABLE 4.16 FOR AVAILABLE DATA.

TABLE 4.14
PASSENGERS DESTINATION BY STATE OF ORIGIN
FOR CALENDAR YEAR "1980"

STATE OF ORIGIN	1980 50 STATES AND U.C.			1980 INTERNATIONAL		
	PASSENGERS	PASSENGER - MILES (MIL.)	NO. OF MARKETS	PASSENGERS	PASSENGER - MILES (MIL.)	NO. OF MARKETS
ALABAMA	13,343	1.6	15	--	--	--
ALASKA	231,093	22.0	133	--	--	--
ARIZONA	289,209	49.8	64	11	*	1
ARKANSAS	239,409	47.5	66	--	--	--
CALIFORNIA	645,885	92.2	167	7,529	2.0	16
COLORADO	333,58	47.1	53	--	--	--
CONNECTICUT	317,055	41.9	64	1,782	4.5	5
DELAWARE	--	--	--	--	--	--
DISTRICT OF COLUMBIA	675,965	84.6	52	--	--	--
FLORIDA	328,110	38.1	67	77,786	11.6	11
GEORGIA	108,516	17.8	27	--	--	--
HAWAII	252,265	20.7	63	--	--	--
IDAHO	94,250	18.2	60	--	--	--
ILLINOIS	594,520	85.1	85	--	--	--
INDIANA	252,591	34.6	19	--	--	--
IOWA	3,227	.6	18	--	--	--
KANSAS	74,654	5.8	11	--	--	--
KENTUCKY	45,413	6.9	11	--	--	--
LOUISIANA	188,836	31.3	46	--	--	--
MAINE	172,806	36.0	58	1,146	2.0	10
MARYLAND	319,329	28.4	36	--	--	--
MASSACHUSETTS	588,765	71.2	65	4,884	1.4	2
MICHIGAN	136,959	23.6	31	--	--	--
MINNESOTA	14,175	2.1	16	--	--	--
MISSISSIPPI	38,807	5.5	10	--	--	--
MISSOURI	251,641	30.0	82	--	--	--
MONTANA	124	*	3	--	--	--
NEBRASKA	32,984	6.8	33	--	--	--
NEVADA	272,689	47.1	27	--	--	--
NEW HAMPSHIRE	107,229	9.6	25	2	*	1
NEW JERSEY	443,444	48.9	75	11	*	1
NEW YORK	1,177,786	158.4	230	2,216	.4	7
NORTH CAROLINA	167,721	22.4	86	--	--	--
NORTH DAKOTA	2,872	.5	18	--	--	--
OHIO	270,773	32.6	34	--	--	--
OKLAHOMA	79,972	13.1	34	--	--	--
OREGON	211,200	38.6	100	--	--	--
PENNSYLVANIA	1,940,792	194.7	109	--	--	--
RODE ISLAND	123,924	14.3	16	--	--	--
SOUTH CAROLINA	42,944	5.6	45	--	--	--
SOUTH DAKOTA	598	*	9	--	--	--
TEXAS	1,072,260	40.2	159	877	*	2
UTAH	52,574	9.2	29	--	--	--
VERMONT	37,244	5.6	26	--	--	--
VIRGINIA	198,542	32.0	66	--	--	--
WASHINGTON	351,136	45.3	137	572	*	1
WEST VIRGINIA	137,386	14.9	22	--	--	--
WISCONSIN	39,191	7.6	26	--	--	--
WYOMING	63,135	16.0	15	--	--	--
TOTAL U.S. (R)	13,205,522	1,637.2	2,683	96,616	21.9	57
TOTAL U.S. TERRITORIES	--	--	--	2,216,831	162.5	104
TOTAL FOREIGN	--	--	--	342,353	47.0	90
TOTAL - ALL	13,205,522	1,637.2	2,683	2,655,800	251.4	251

(R) REvised-

* FIGURE ROUNDED TO LESS THAN .1 MILLION

** BEGINNING WITH 1981, DATA WILL NO LONGER BE AVAILABLE THROUGH CIVIL AERONAUTICS BOARD.

NOTE: "MARKETS" MEANS SERVICE BETWEEN TWO POINTS.

SOURCE: "COMPUTER AIR CARRIER TRAFFIC STATISTICS," 12/31/80, CIVIL AERONAUTICS BOARD

Tablet 4.1b

DOMESTIC INTENSITY PASSENGER-MILES BY MODE OF TRAVEL AND CLASS OF SERVICE: 1972 THROUGH 1981
 (IN MILLIONS)

MODE AND CLASS	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981
TOTAL	1,277,070	1,523,770	1,282,924	1,285,379	1,263,218	1,455,920	1,518,122	1,529,721	1,494,782	
TOTAL COMMON CARRIER ¹	148,070	157,770	161,924	162,579	176,218	188,020	213,622	241,821	231,582	U/A
SCHEDULED AIR CARRIER ¹	118,138	126,317	128,425	131,728	146,271	156,610	182,669	208,856	200,044	
REGULAR SERVICE	21,956	23,564	24,602	23,622	24,400	25,441	29,665	41,855	57,444	
COACH SERVICE	96,182	102,755	105,823	108,106	120,871	151,169	155,044	167,005	162,500	
CLASS I LINEHAUL RAILWAYS ²	4,552	5,053	5,795	5,251	5,847	5,710	5,556	6,265	4,436	
FIRST-CLASS SERVICE	520	583	615	502	570	524	467	489	419	LUM&K
COACH SERVICE	3,812	4,470	5,186	4,749	5,277	5,186	5,089	5,876	4,017	
MOTOR CARRIERS ³										
CLASS I, II, III	25,600	26,400	27,700	25,400	25,100	25,700	25,400	26,600	26,900	
PRIVATE AUTOMOBILES	1,129,000	1,166,000	1,071,000	1,123,000	1,187,000	1,245,940	1,304,200	1,387,540	1,203,400	AVAILABLE
PERCENT AIR TO TOTAL	9.3	9.5	10.4	10.3	10.6	10.9	12.0	13.7	15.4	
PERCENT AIR TO TOTAL COMMON CARRIER	79.8	80.1	79.5	81.1	82.4	85.5	85.5	86.4	86.5	
PERCENT TOTAL RAIL TO AIR	3.7	4.0	4.5	4.0	4.0	5.6	5.0	5.0	2.2	
PERCENT FIRSTCLASS RAIL TO TOTAL AIR	0.4	0.5	0.5	0.4	0.4	0.5	0.5	0.2	0.2	

¹ SCHEDULED OPERATIONS OF DOMESTIC TRUNK AND LOCAL SERVICE CARRIERS.

² INCLUDES PULLMAN COMPANY AND EXCLUDES COMMUTATION.

³ EXCLUDES INFRASTATE AND OTHER LOCAL MOVEMENTS.

SOURCES: INTERSTATE COMMERCE COMMISSION, BUREAU OF ECONOMICS; BUREAU OF ACCOUNTS AND STATISTICS, U.S. AND TRANSPORTATION FACTS AND TRENDS, JULY 1981.

** SEE EXPLANATION REGARDING THE IMPACT OF DEREGULATION IN THE INTRODUCTION TO CHAPTER 6.

V. U.S. CIVIL AIR CARRIER FLEET

U.S. air carrier fleet data shown in this chapter were developed from monthly Aircraft/Engine Utilization Reports submitted by air carrier operators. The aircraft population shown in this chapter is not an inventory of the aircraft owned by the air carriers but represents the aircraft actually used by the air carrier fleet during December 1981.

The air carrier fleet size shown for 1979 is significantly larger than that for 1978. This increase is partly due to the deregulation of the airlines under the Airline Deregulation Act of 1978 and the associated entry of new carriers. The increase is also due to revised FAA reporting requirements. Beginning in 1979 multiengine aircraft in scheduled passenger and cargo service of the commuter air taxis must be reported as being in air carrier service. The first year these aircraft were counted as air carrier aircraft was 1979. A new class of air carrier was also created in 1979--the all cargo air service operators (Section 418). In the past these operators were classified as air taxi and aircraft used in the service were counted in the air taxi group.

TABLE 5.1

COMPOSITION OF U.S. AIR CARRIER FLEET BY TYPE OF AIRCRAFT:
DECEMBER 1972 through 1981

Year	Total	Fixed-wing Aircraft					Rotary-wing Aircraft		
		Total Fixed- Wing	Turbine			Piston	Total Rotary- Wing	Turbine	Piston
			Total	Turbojet	Turboprop				
1972	2,583	2,569	2,436	2,118	318	133	14	11	3
1973	2,599	2,586	2,449	2,145	304	137	13	10	3
1974	2,472	2,462	2,344	2,078	266	118	10	10	—
1975	2,495	2,488	2,374	2,114	260	114	7	7	—
1976	2,492	2,487	2,384	2,139	245	103	5	4	1
1977	2,473	2,470	2,402	2,168	234	68	3	3	—
1978	2,545	2,542	2,477	2,237	240	65	3	3	—
1979	3,609	3,608	3,053	2,486	566	556	1	1	—
1980	3,808	3,806	3,218	2,531	687	588	2	2	—
1981	3,973	3,969	3,363	2,511	852	606	4	4	—

Note: Includes only those aircraft used during the last quarter. 1971-1978 does not include aircraft operated by air taxi operators who hold authority to operate aircraft over 12,500 pounds, turbojet aircraft under blanket authority, or aircraft operated by air travel clubs.

Beginning in 1979 data also includes large aircraft operated by air taxis, air travel clubs, and all cargo air service operators, and multi-engine aircraft in passenger operations of commuters.

TABLE 5.2
TOTAL AIRCRAFT IN OPERATION BY THE U.S. AIR CARRIER FLEET BY TYPE
OF CARRIER AND BY TYPE OF AIRCRAFT: DECEMBER 1980 and 1981

Type of Aircraft	All Air Carriers		Certified Route Air Carriers		Supplemental Air Carriers		Commercial Operators		Air Taxi Operators		Commuter Operators		All Cargo Operators		Air Travel Clubs	
	1981	1980	1981	1980	1981	1980	1981	1980	1981	1980	1981	1980	1981	1980	1981	1980
Total Aircraft	<u>3,973</u>	<u>3,808</u>	<u>2,523</u>	<u>2,505</u>	<u>167</u>	<u>148</u>	<u>33</u>	<u>24</u>	<u>117</u>	<u>135</u>	<u>970</u>	<u>838</u>	<u>152</u>	<u>146</u>	<u>11</u>	<u>12</u>
Fixed wing--total	<u>3,969</u>	<u>3,806</u>	<u>2,523</u>	<u>2,503</u>	<u>167</u>	<u>148</u>	<u>33</u>	<u>24</u>	<u>115</u>	<u>133</u>	<u>968</u>	<u>838</u>	<u>152</u>	<u>146</u>	<u>11</u>	<u>12</u>
Turbine-powered--total	<u>3,363</u>	<u>3,218</u>	<u>2,518</u>	<u>2,499</u>	<u>144</u>	<u>132</u>	<u>23</u>	<u>15</u>	<u>54</u>	<u>66</u>	<u>502</u>	<u>394</u>	<u>111</u>	<u>100</u>	<u>11</u>	<u>12</u>
Turbojet--total	<u>2,511</u>	<u>2,531</u>	<u>2,295</u>	<u>2,336</u>	<u>78</u>	<u>59</u>	<u>10</u>	<u>8</u>	<u>22</u>	<u>29</u>	<u>14</u>	<u>16</u>	<u>82</u>	<u>76</u>	<u>10</u>	<u>9</u>
4-engine	365	441	280	373	58	40	10	8	—	—	—	—	9	8	7	9
3-engine	1,363	1,347	1,284	1,311	15	12	—	—	16	—	7	—	40	24	1	—
2-engine	783	743	731	652	5	7	—	—	6	29	7	5	34	45	—	5
Turboprop--total	<u>852</u>	<u>687</u>	<u>223</u>	<u>163</u>	<u>66</u>	<u>73</u>	<u>13</u>	<u>7</u>	<u>32</u>	<u>37</u>	<u>488</u>	<u>380</u>	<u>29</u>	<u>24</u>	<u>1</u>	<u>3</u>
4-engine	105	92	15	13	56	55	5	4	—	—	18	8	10	9	1	3
2-engine	747	595	208	150	10	18	8	3	32	37	470	372	19	15	—	—
Piston-powered--Total	<u>606</u>	<u>588</u>	<u>5</u>	<u>6</u>	<u>23</u>	<u>16</u>	<u>10</u>	<u>9</u>	<u>61</u>	<u>67</u>	<u>466</u>	<u>444</u>	<u>41</u>	<u>46</u>	<u>—</u>	<u>—</u>
4-engine	68	73	3	6	17	16	4	3	5	4	22	24	17	20	—	—
2-engine	535	515	2	—	6	—	6	6	56	63	441	420	24	26	—	—
1-engine	3	—	—	—	—	—	—	—	—	—	3	—	—	—	—	—
Rotary-wing--total	<u>4</u>	<u>2</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>2</u>	<u>2</u>	<u>2</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
Turbine-powered	<u>4</u>	<u>2</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>2</u>	<u>2</u>	<u>2</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>

TABLE 5.3

COMPOSITION OF U.S. AIR CARRIER FLEET BY MANUFACTURER
AND MODEL: 1980 and 1981

Type of Aircraft Number of Engines and Model	1980 ^{E/}	1981	Type of Aircraft Number of Engines and Model	1980 ^{E/}	1981
Total Aircraft	<u>3,808</u>	<u>3,973</u>	Israel Aircraft II24	1	—
Fixed-wing--total	<u>3,806</u>	<u>3,969</u>	Learjet LR23	2	—
Turbine-powered--total	<u>3,218</u>	<u>3,363</u>	Learjet LR24	3	3
4-engine--total	<u>533</u>	<u>470</u>	Learjet LR25	7	1
Turbojet--total	<u>441</u>	<u>365</u>	Learjet LR35	3	—
Boeing B707	146	66	Rockwell		
Boeing B720	3	2	International NA265	2	—
Boeing B747	144	147	Sud Aviation SE210	5	2
Convair CV22	1	2	Sud Aviation SN601	3	2
Convair CV30	5	4	Turboprop--total	<u>595</u>	<u>747</u>
Douglas DC8	142	144	Beech BE90	2	2
Turboprop--total	<u>92</u>	<u>105</u>	Beech BE99	87	102
Canadair CL44	?	4	Beech BE200	1	2
DeHavilland DHC 7	18	29	Beech STC18	5	—
Lockheed L188	52	51	Cessna C441	1	—
Lockheed L382	20	20	Construcciones		
Vickers V745	—	1	Aeronautics C212	2	15
3-engine--total	<u>1,347</u>	<u>1,363</u>	Convair CV580/640	99	233
Turbojet--total	<u>1,347</u>	<u>1,363</u>	Convair CV600	17	18
Boeing B727	1,092	1,096	DeHavilland DHC6	107	96
Douglas DC10	153	161	Embraer EMB110	34	66
Lockheed L1011	102	106	Fairchild F27	6	8
2-engine--total	<u>1,338</u>	<u>1,530</u>	Fairchild FH227	8	6
Turbojet--total	<u>743</u>	<u>783</u>	Fokker F27	4	2
Airbus A300	19	25	GAF Nomad N22	9	3
Boeing B737	220	236	Grumman G73	—	1
British Aircraft BA111	27	27	Grumman G159	16	17
Cessna C500	5	1	Handley-Page HP137	15	12
Dassault MD20	42	27	Hawker-Siddeley HS748	2	2
Douglas DC9	394	447	Israel Aircraft AR101B	—	2
Fokker F28	5	9	Nihon YS11	22	27
Grumman G1159	5	3	Nord ND262	18	8

TABLE 5.3 (Continued)
 COMPOSITION OF U.S. AIR CARRIER FLEET BY MANUFACTURER
 AND MODEL: 1980 and 1981

Type of Aircraft Number of Engines and Model	1980 ^{r/}	1981	Type of Aircraft Number of Engines and Model	1980r	1981
Piston-powered--total	<u>588</u>	<u>606</u>	Curtiss-Wright C46	13	12
4-engine--total	<u>73</u>	<u>68</u>	DeHavilland DHC4	1	—
DeHavilland DHC114	27	21	DeHavilland DHC104	—	2
Douglas DC4	5	6	Dornier DO28	1	2
Douglas DC6	41	41	Douglas DC3	68	56
2-engine--total	<u>515</u>	<u>535</u>	Fairchild C82	2	2
Aero Commander AC500	3	1	Grumman G21	6	1
Aero Commander AC680	3	1	Grumman G44	—	1
Beech BE18	13	20	Grumman G73	4	1
Beech BE55	2	2	Martin M404	14	11
Beech BE58	3	3	Piper PA23	26	19
Beech BE65	1	4	Piper PA30	2	2
Beech BE80	2	—	Piper PA31	126	145
Beech BE95	1	1	Piper PA34	12	15
Britten-Norman BN2A	31	35	Piper PA44	1	1
Cessna C310	7	5	Piper PA600	1	—
Cessna C340	2	1	l-engine--total	—	<u>3</u>
Cessna C401	2	—	Beech B36	—	1
Cessna C402	115	131	Piper PA32	—	2
Cessna C404	20	17	Rotary-wing--total	2	<u>4</u>
Cessna C411	1	1	Turbine-powered--total	2	<u>4</u>
Cessna C414	1	3	Bell HB206	—	2
Cessna C421	1	—	Kawasaki KV107	2	—
Convair CV240	4	12	Sikorsky S76	—	2
Convair CV340/440	26	28			

r/ Revised.

TABLE 5.4
TOTAL FLIGHT TIME BY TYPE OF AIRCRAFT IN THE U.S. AIR
CARRIER FLEET: 1980 and 1981

Type of Aircraft Number of Engines and Model	Hours		Type of Aircraft Number of Engines and Model	Hours	
	1981	1980		1981	1980
Total Aircraft	<u>8,125,157</u>	<u>8,221,961</u>	Rockwell International		
Total Fixed-wing	<u>8,124,018</u>	<u>8,221,591</u>	NA 265	46	589
Turbine-powered--total	<u>7,622,266</u>	<u>7,742,168</u>	SUD Aviation SE210	1,177	5,966
4-engine--total	<u>1,144,835</u>	<u>1,382,064</u>	SUD Aviation SN601	1,434	1,600
Turbojet--total	<u>957,880</u>	<u>1,223,377</u>	Turboprop--total	<u>1,129,107</u>	<u>950,949</u>
Boeing B707	153,877	359,112	Beech BE90	209	537
Boeing B720	438	1,124	Beech BE99	164,467	171,475
Boeing B747	531,035	529,314	Beech BE100	—	255
Convair CV22	543	71	Beech STC18	236	2,769
Convair CV30	657	1,437	Beech BE200	960	886
Douglas DC8	271,330	331,417	Cessna C402	499	—
Lockheed L1329	—	487	Cessna C414	173	—
SN Concorde	—	415	Cessna C441	291	107
Turboprop--total	<u>186,955</u>	<u>158,687</u>	Construcciones		
Canadair CL44	4,617	2,155	Aeronautics C212	109,613	637
DeHavilland DHC7	64,698	31,472	Convair CV580	115,962	137,907
Lockheed L188	60,909	69,217	Convair CV600	21,206	20,529
Lockheed L382	56,615	55,843	DeHavilland DHC6	170,458	167,282
Vickers V745	116	—	Embraer EMB110	94,790	36,468
3-engine--total	<u>3,531,243</u>	<u>3,693,218</u>	Fairchild F27	6,132	3,441
Turbojet--total	<u>—,1243</u>	<u>3,693,218</u>	Fairchild F227	13,690	17,134
Boeing B727	2,769,906	2,949,274	Fokker F27	3,675	5,196
Douglas DC10	442,698	441,576	GAF Nomad N22	10,432	5,546
Lockheed L1011	318,639	302,368	Grumman GA73	641	—
2-engine--total	<u>2,946,188</u>	<u>2,666,886</u>	Grumman G159	14,843	14,273
Turbojet--total	<u>1,817,081</u>	<u>1,715,937</u>	Hawker-Siddeley HS748	4,979	2,564
Airbus A300	61,783	43,703	Handley-Page HP137	25,836	25,982
Boeing B727	585,997	522,556	Israel Aircraft AR101B	139	—
British Aircraft BA111	58,560	65,194	Nihon YS11	35,737	37,280
Cessna C500	1,767	3,773	Nord ND262	16,206	35,724
Dassault MD20	31,559	33,823	Nord STC262	5,780	9,133
Douglas DC9	17,123	2,642	Piper PA31T	70	—
Fokker F28	1,051,747	1,023,200	Short SC7	1,008	489
Grumman G159	2,392	2,774	Short SD3	77,708	66,606
Hamburger Flugzeugbau			Swearingen SA26	—	39
HF320	—	1,310	Swearingen SA226	223,059	177,240
Israel Aircraft IL1123	—	39	Swearingen SA227	609	—
Israel Aircraft IL1124	88	209	Piston-Powered--Total	<u>501,752</u>	<u>479,423</u>
Learjet LR23	1,228	1,658	4 engine--total	<u>64,951</u>	<u>70,295</u>
Learjet LR24	476	1,160	DeHavilland DH114	42,702	39,110
Learjet LR25	1,007	4,041	Douglas DC4	1,304	3,150
Learjet LR35	697	1,700	Douglas DC6	20,945	28,035
			2-engine--total	<u>436,642</u>	<u>409,128</u>
			Aero Commander AC680	1,129	892
			Aero Commander AC500	789	1,503

TABLE 5.4 (Continued)

TOTAL FLIGHT TIME BY TYPE OF AIRCRAFT IN THE U.S. AIR
CARRIER FLEET: 1980 and 1981

Type of Aircraft Number of Engines and Model	Hours		Type of Aircraft Number of Engines and Model	Hours	
	1981	1980		1981	1980
Beech BE18	8,160	7,521	Gruumman GA44	76	—
Beech BE55	981	961	Gruumman G73	6,580	3,662
Beech BE58	1,476	827	Martin M404	9,014	7,604
Beech BE65	3,435	1,160	Piper PA23	9,969	9,996
Beech BE76	—	123	Piper PA30	392	281
Beech BE80	591	3,002	Piper PA31	118,451	120,618
Beech BE95	557	105	Piper PA34	8,853	8,569
Britten-Norman BN2	39,315	22,646	Piper PA44	238	938
Cessna C310	4,227	2,857	Piper PA600AS	108	7,596
Cessna C337	—	129	1-engine--total	<u>159</u>	—
Cessna C340	138	499	Beech B36	28	—
Cessna C401	1,234	630	Piper PA32	31	—
Cessna C402	137,005	120,892	Rotary-wing--total	<u>1,139</u>	370
Cessna C404	22,977	22,260	Bell Helicopter HB206	119	—
Cessna C411	60	470	Kawasaki KV107	586	370
Cessna C414	472	655	Sikorsky S76	434	—
Cessna C421	14	573			
Convair CV240	8,299	3,633			
Convair CV340/440	17,163	13,744			
Curtiss-Wright CW46	3,358	4,673			
De Havilland DHC4	—	91			
De Havilland DH104	2,014	1,268			
Dornier DC28	199	400			
Douglas DC3	25,861	32,749			
Fairchild C82	2,198	2,127			
Gruumman G21	1,309	3,474			

1981 includes 6,293,593 hours for Certificated Route Air Carriers; 248,319 hours for Supplemental Carriers; 26,067 hours for Commercial Carriers; 93,674 hours for Air Taxi; 1,335,201 hours for commuters; 3,176 hours for Air Travel Clubs and 125,127 for All Cargo Carriers.

1980 includes 6,743,303 hours for Certificated Route Air Carriers; 237,829 hours for Supplemental Carriers; 18,228 hours for Commercial Carriers; 92,015 hours for Air Taxi; 989,800 hours for commuters; 4,156 hours Air Travel Clubs and 136,361 for All Cargo Carriers.

AD-A128 693

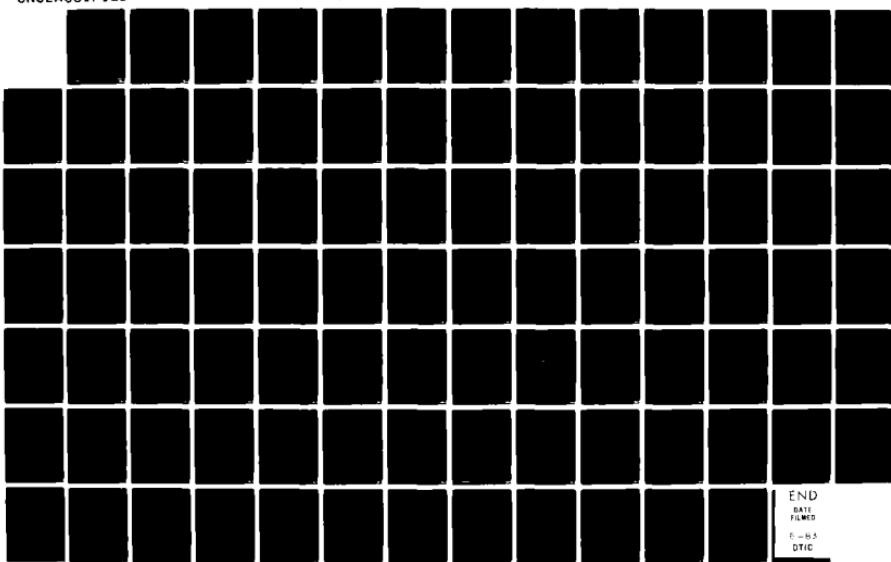
FAA STATISTICAL HANDBOOK OF AVIATION CALENDAR YEAR 1981
(U) FEDERAL AVIATION ADMINISTRATION WASHINGTON DC
OFFICE OF MANAGEMENT SYSTEMS 31 DEC 81

2/2

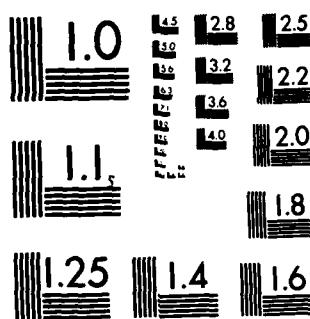
UNCLASSIFIED

F/G 1/2

NL



END
DATE FILMED
R-165
DTIC



MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

TABLE 5.5

TOTAL AIRCRAFT IN CERTIFICATED ROUTE AIR CARRIER OPERATIONS
BY CARRIER AND BY ENGINE TYPE: DECEMBER 1981
(LARGE AIRCRAFT ONLY)

Air Carrier Group and Carrier	Total	Turbojet				Turboprop			Piston		
		Total Turbojet	4-engine	3-engine	2-engine	Total Turboprop	4-engine	2-engine	Total Piston	4-engine	2-engine
Total	2,523	2,495	280	1,284	731	223	15	208	5	3	2
Trunk Carriers--total	1,519	1,519	188	1,131	200	—	—	—	—	—	—
American	227	227	14	213	—	—	—	—	—	—	—
Braniff	84	84	12	72	—	—	—	—	—	—	—
Continental	73	73	—	73	—	—	—	—	—	—	—
Delta	215	215	13	166	36	—	—	—	—	—	—
Eastern	267	267	—	164	103	—	—	—	—	—	—
Northwest	112	112	29	83	—	—	—	—	—	—	—
Trans World	172	172	60	112	—	—	—	—	—	—	—
United	299	299	60	190	49	—	—	—	—	—	—
Western	70	70	—	58	12	—	—	—	—	—	—
Local Service Carriers--total	785	568	—	68	500	215	10	205	2	—	—
Air California	21	21	—	—	21	—	—	—	—	—	—
Air Florida	34	34	—	9	25	—	—	—	—	—	—
Air Illinois	11	—	—	—	—	9	—	9	2	—	—
Air Wisconsin	20	—	—	—	—	20	10	10	—	—	—
Altair Airlines	6	6	—	—	6	—	—	—	—	—	—
American Inter- national Inc.	3	3	—	—	3	—	—	—	—	—	—
Aspen	10	—	—	—	—	10	—	10	—	—	—
Empire Airlines	3	3	—	—	3	—	—	—	—	—	—
Frontier	195	45	—	—	45	150	—	150	—	—	—
Jet America Airlines	2	2	—	—	2	—	—	—	—	—	—
Midway	13	13	—	—	13	—	—	—	—	—	—
Muse Air Corp.	2	2	—	—	2	—	—	—	—	—	—
Ozark	42	42	—	—	42	—	—	—	—	—	—
Pacific Southwest	31	31	—	18	13	—	—	—	—	—	—
Piedmont	55	51	—	9	42	4	—	4	—	—	—
Republic	162	145	—	16	129	17	—	17	—	—	—
Southwest	27	27	—	—	27	—	—	—	—	—	—
Texas International	37	37	—	—	37	—	—	—	—	—	—
U.S. Air, Inc.	106	106	—	16	90	—	—	—	—	—	—
Wright	5	—	—	—	—	5	—	5	—	—	—
Alaska-Hawaii Carriers--Total	39	31	1	5	25	8	5	3	—	—	—
Aloha	8	8	—	—	8	—	—	—	—	—	—
Hawaiian	10	8	—	—	8	2	2	—	—	—	—
Reeve Aleutian	6	—	—	—	—	6	3	3	—	—	—
Wien Air Alaska	15	15	1	5	9	—	—	—	—	—	—
International and Territorial Passenger/ Cargo--Total	128	128	45	80	3	—	—	—	—	—	—
Alaska	3	3	—	—	3	—	—	—	—	—	—
Pan Am World	125	123	45	80	—	—	—	—	—	—	—
Scheduled Air Cargo Carriers--Total	52	49	46	—	3	—	—	—	3	3	—
Airlift Inter- national	6	6	6	—	—	—	—	—	—	—	—
Flying Tiger Line	39	39	39	—	—	—	—	—	—	—	—
Jetway Inc.	7	4	1	—	3	—	—	—	3	3	—

TABLE 5.b

AIRCRAFT IN OPERATION BY CERTIFIED ROUTE AIR CARRIERS, BY MANUFACTURER AND MODEL
 DECEMBER 31, 1972 through 1981*
 (LARGE AIRCRAFT ONLY)

Aircraft Make and Model	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981
Total	2,361	2,361	2,244	2,267	2,271	2,234	2,348	2,466	2,505	2,523
Turbojet--4-engine--total	768	712	594	561	533	500	465	455	373	280
Boeing 707	337	315	281	264	240	244	198	170	135	45
Boeing 720	56	44	30	23	18	15	10	2	—	—
Boeing 747	105	109	108	97	104	107	115	130	141	142
Concorde	—	—	—	—	—	—	—	9	—	—
Convair 880	41	37	—	—	—	—	—	—	—	—
Douglas DC8	227	207	180	177	171	154	142	144	97	93
Lockheed L1019	1	—	—	—	—	—	—	—	—	—
Turbojet--3-engine--total	738	844	893	961	992	1,035	1,140	1,232	1,311	1,284
Boeing 727	662	710	724	765	793	836	931	1,014	1,070	1,033
Douglas DC10	59	86	103	121	122	122	127	131	139	145
Lockheed L1011	17	48	66	76	77	77	82	87	102	106
Turbojet--2-engine--total	522	500	501	500	518	529	579	621	652	731
Airbus A300	—	—	—	—	—	—	6	12	19	25
BAC111	58	31	36	30	31	31	30	28	27	27
Boeing 737	134	134	136	133	138	141	173	201	214	235
Dassault RD20	1	—	—	—	—	—	—	—	—	—
Douglas DC9	329	335	329	337	349	355	370	376	306	432
Fokker F28	—	—	—	—	—	—	—	—	3	9
Learjet LR 23	—	—	—	—	—	—	—	2	2	—
Learjet LR24	—	—	—	—	—	—	—	1	1	3
Learjet LR25	—	—	—	—	—	—	—	1	—	—
Turboprop--4-engine--total	22	20	17	16	21	6	9	9	13	15
DeHavilland DHC7	—	—	—	—	—	—	—	3	10	12
Lockheed L188	19	19	17	16	21	6	9	6	3	3
Lockheed L382	3	1	—	—	—	—	—	—	—	—
Turboprop--2-engine--total	234	218	186	177	159	150	146	142	150	208
Beech BE99	1	—	—	—	3	3	—	—	5	—
Convair CV580/640	110	105	89	69	69	60	60	59	55	177
Convair 600	25	24	16	19	12	8	8	4	5	5
DeHavilland DHC6	13	9	8	21	18	14	13	16	14	5
Fairchild FH227	32	31	33	29	27	22	23	21	6	—
Fairchild FH27	29	24	15	10	7	6	5	1	3	—
Hawker-Siddeley HS74	—	—	—	—	—	—	—	—	2	2
Handley Page HP 137	—	—	—	—	—	—	—	—	2	2
Nikon TS11	22	23	21	23	23	23	19	12	9	7
Nord ND262	—	—	—	—	—	5	9	—	10	—
Short SC7	2	2	2	3	—	—	—	—	—	—
Short SH330	—	—	—	—	—	—	1	—	—	—
Sweebergen SA226	—	—	—	—	—	6	8	29	39	10
Piston--4-engine--total	3	3	1	1	2	—	—	5	6	3
Douglas DC6, SA, 68	3	3	1	1	2	—	—	6	3	3
DeHavilland DH114	—	—	—	—	—	—	—	—	—	—
Piston--2-engine--total	47	36	32	37	31	11	8	2	—	2
Piston--1-engine--total	13	15	12	7	10	—	2	—	—	—
Helicopters--total	14	13	10	7	5	3	3	—	—	—

*Aircraft not used in air carrier operations, such as those used for crew training and general utility purposes and aircraft held for disposal are excluded.

TABLE 5.7

AIRCRAFT IN OPERATION BY SUPPLEMENTAL CARRIERS, BY
CARRIER, AND BY ENGINE TYPE: DECEMBER 31, 1981
(LARGE AIRCRAFT ONLY)

Name of Carrier	Total Aircraft	Turbojet				Turboprop			Piston		
		Total Turbojet	4-engine	3-engine	2-engine	Total Turboprop	4-engine	2-engine	Total Piston	4-engine	2-engine
Total	167	78	58	15	5	66	56	10	23	17	6
Aero Star	2	2	—	2	—	—	—	—	—	—	—
Aero Transit	2	—	—	—	—	—	—	—	2	—	2
Air Berlin, USA	1	1	—	1	—	—	—	—	—	—	—
Alaska Int'l Air, Inc.	5	—	—	—	—	5	5	—	—	—	—
American Trans Air	4	4	4	—	—	—	—	—	—	—	—
Arrow Airways	8	8	8	—	—	—	—	—	—	—	—
Capitol International Airways	13	13	11	2	—	—	—	—	—	—	—
Conner Airlines	1	—	—	—	—	—	—	—	1	1	—
Elan Air Corporation	1	1	1	—	—	—	—	—	—	—	—
Evergreen Interna- tional Airlines	14	8	5	—	3	6	6	—	—	—	—
Great American Airways	1	1	—	—	1	—	—	—	—	—	—
Gulf Air Transport	3	—	—	—	—	1	1	—	2	—	2
Jet Charter Service	1	1	1	—	—	—	—	—	—	—	—
Rich International Airways	9	3	3	—	—	—	—	—	6	4	2
San Diego Padre Air Travel	1	1	—	—	1	—	—	—	—	—	—
Sunland Airlines	1	1	1	—	—	—	—	—	—	—	—
Trans America Airlines	33	13	12	1	—	20	20	—	—	—	—
World Airways	15	15	6	9	—	—	—	—	—	—	—
Zantop Int'l Airlines	52	6	6	—	—	34	24	10	12	12	—

TABLE 5.8

AIRCRAFT IN OPERATION BY SUPPLEMENTAL CARRIERS,
BY MANUFACTURER AND MODEL:
DECEMBER 1979 - 1981
(LARGE AIRCRAFT ONLY)

Aircraft Make and Model	1979	1980	1981
Total	<u>70</u>	<u>148</u>	<u>167</u>
Turbojet--total	<u>39</u>	<u>59</u>	<u>78</u>
4-engine	<u>26</u>	<u>40</u>	<u>58</u>
Boeing B707	—	6	12
Boeing B747	1	3	5
Douglas DC8	25	31	41
3-engine	<u>9</u>	<u>12</u>	<u>15</u>
Boeing B727	—	1	3
Douglas DC10	9	11	12
2-engine	<u>4</u>	<u>7</u>	<u>5</u>
Boeing B737	4	5	1
Douglas DC9	—	1	4
Learjet LR24	—	1	—
Turboprop--total	<u>24</u>	<u>73</u>	<u>66</u>
4-engine	<u>23</u>	<u>55</u>	<u>56</u>
Lockheed L188	11	38	39
Lockheed L382	12	17	17
2-engine	<u>1</u>	<u>18</u>	<u>10</u>
Beech STC18	2	2	—
Convair CV640	14	14	10
Curtiss Wright C46	—	2	—
Fairchild FH227	1	—	—
Piston--total	<u>7</u>	<u>16</u>	<u>23</u>
4-engine	<u>3</u>	<u>16</u>	<u>17</u>
Douglas DC6	3	16	17
2-engine	<u>4</u>	—	<u>6</u>
Convair CV240	2	—	—
Convair CV440	—	—	2
Curtiss Wright CW46	2	—	2
Piper PA31	—	—	2

TABLE 5.9
AIRCRAFT IN OPERATION BY COMMERCIAL OPERATORS, BY CARRIER,
AND BY ENGINE TYPE: DECEMBER 1981
(Large Aircraft Only)

Name of Carrier	Total Aircraft	Turbojet			Turboprop			Piston		
		Total Turbojet	Turbojet 4-engine	Turbojet 2-engine	Total Turboprop	Turboprop 4-engine	Turboprop 2-engine	Total Piston	Piston 4-engine	Piston 2-engine
Total	33	10	10	—	13	5	8	10	4	6
Academy Airlines	4	—	—	—	—	—	—	—	—	4
Aero America, Inc.	1	1	1	—	—	—	—	—	—	—
Air Distribution, Inc.	2	—	—	—	—	—	—	—	2	2
Air Transport International	—	—	—	—	—	—	—	—	—	—
Air Cargo	1	1	1	—	—	—	—	—	—	—
Bluebell Aviation	2	—	—	—	2	2	—	—	—	—
Central America International, Inc.	2	2	2	—	—	—	—	—	—	—
Challenge Air Transport, Inc.	5	1	1	—	—	—	—	4	2	2
Era Helicopter	3	—	—	—	3	—	3	—	—	—
Fairways Corporation	3	—	—	—	3	—	3	—	—	—
Global Int'l Airways Corporation	4	4	4	—	—	—	—	—	—	—
Great Western Airlines	2	—	—	—	2	—	2	—	—	—
South Pacific Island Airways	1	1	1	—	—	—	—	—	—	—
Southern Air Transport, Inc.	3	—	—	—	3	3	—	—	—	—

TABLE 5.10

AIRCRAFT IN OPERATION BY COMMERCIAL OPERATORS, BY MANUFACTURER
AND MODEL: DECEMBER 1978 AND 1981
(LARGE AIRCRAFT ONLY)

Aircraft Make and Model	1978	1979	1980	1981
Total Aircraft	<u>123</u>	<u>118</u>	<u>24</u>	<u>33</u>
Turbojet -- total	<u>16</u>	<u>15</u>	<u>8</u>	<u>10</u>
4-engine	<u>18</u>	<u>16</u>	<u>8</u>	<u>10</u>
Boeing 707	3	4	3	5
Boeing 720	4	---	1	1
Convair CV22	---	---	1	2
Douglas DC8	10	9	3	2
Lockheed L1329	1	1	---	---
2-engine	---	1	---	---
Boeing 737	---	---	---	---
Douglas DC9	---	1	---	---
Turboprop -- total	<u>52</u>	<u>56</u>	<u>7</u>	<u>13</u>
4-engine	<u>32</u>	<u>31</u>	<u>4</u>	<u>5</u>
Canadair CL44	---	---	1	2
Lockheed L188	24	23	---	---
Lockheed L382	8	8	3	3
2-engine	<u>20</u>	<u>25</u>	<u>3</u>	<u>8</u>
Beech BE99	---	---	---	1
Convair CV580	2	2	2	5
Convair CV640	14	14	---	---
DeHavilland DHC6	---	2	---	1
Fairchild F27	2	2	---	---
Grumman G159	1	1	1	1
Handley Page HP137	---	3	---	---
Hawker Siddeley HS748	1	1	---	---
Piston -- Total	<u>53</u>	<u>47</u>	<u>9</u>	<u>10</u>
4-engine	<u>39</u>	<u>39</u>	<u>3</u>	<u>4</u>
Canadair, Ltd. C44-D4	---	1	---	---
Douglas DC4	36	1	1	2
Douglas DC6	---	36	2	2
Douglas DC7	1	---	---	---
Lockheed L1049	2	1	---	---
2-engine	<u>14</u>	<u>8</u>	<u>6</u>	<u>6</u>
Convair CV440	---	---	---	---
Curtiss-Wright C46	5	4	1	2
Dehavilland DHC4	2	---	---	---
Douglas DC3	2	2	5	4
Fairchild C82	2	2	---	---
Martin M404	3	---	---	---

TABLE 5.11

TOTAL AIRCRAFT IN OPERATION BY COMMUTER AIR TAXI OPERATORS, BY CARRIER, AND BY ENGINE TYPE: DECEMBER 1981

Name of Carrier	Total all Aircraft	Turbojet		Turboprop		Piston			Helicopter
		3-engine	2-engine	4-engine	2-engine	4-engine	2-engine	1-engine	
Total	920	7	7	18	470	22	441	3	2
Aero Mech, Inc.	14	---	---	---	14	---	---	---	---
Air Chico	2	---	---	---	---	---	2	---	---
Air Cortez	4	---	---	---	---	---	4	---	---
Air Hawaii	5	---	---	---	---	---	5	---	---
Air Irvine, Inc.	4	---	---	---	---	---	4	---	---
Air Kentucky	4	---	---	---	4	---	---	---	---
Airlift Associates	2	---	---	---	---	---	2	---	---
Air Link	1	---	---	---	---	---	1	---	---
Air Logistics of Alaska, Inc.	4	---	---	---	4	---	---	---	---
Air Nevada Airlines	10	---	---	---	---	---	10	---	---
Air North	9	---	---	---	---	---	9	---	---
Air North, Inc.	7	---	---	---	7	---	---	---	---
Air Olympia	2	---	---	---	---	---	2	---	---
Air South	4	---	---	---	4	---	---	---	---
Air South	10	---	---	---	---	---	10	---	---
Air Spur	2	---	---	---	2	---	---	---	---
Air Texana	3	---	---	---	---	---	3	---	---
Air U.S.	3	---	---	---	3	---	---	---	---
Air Vectors Airways, Inc.	5	---	---	---	---	---	5	---	---
Airmark Corp.	1	---	1	---	---	---	---	---	---
Airway of New Mexico	3	---	---	---	---	---	3	---	---
Arcata Flying Service	2	---	---	---	---	---	2	---	---
Arctic Circle Air Svc., Inc.	2	---	---	---	1	---	1	---	---
Atlantic Air	1	---	---	---	---	---	1	---	---
Atlantic Southeast	7	---	---	---	7	---	---	---	---
Atlantic Airlines, Inc.	8	---	---	---	3	---	5	---	---
Benkair, Inc.	3	---	---	---	---	---	3	---	---
Bar Harbour Airlines	16	---	---	---	16	---	---	---	---
Brennan & Hargraves	1	---	---	---	---	---	1	---	---
Bridger Air	2	---	---	---	---	---	2	---	---
Britt Airlines	20	---	---	---	20	---	---	---	---
Britt Airways	4	---	---	---	4	---	---	---	---
California Amphibious Trans.	2	---	---	---	1	---	1	---	---
Cape Smythe Air Service	4	---	---	---	4	---	---	---	---
Capitol Air Service	6	---	---	---	1	---	5	---	---
Cascade Airways, Inc.	14	---	---	---	14	---	---	---	---
Catkill Airways	3	---	---	---	---	---	3	---	---
Cardinal Aviation	2	---	---	---	---	---	2	---	---
Centennial Airlines	7	---	---	---	---	---	7	---	---
Centron Airlines	1	---	---	---	---	---	1	---	---
Chaparral Airlines	8	---	---	---	7	---	1	---	---
Chautauque Airlines	6	---	---	---	6	---	---	---	---
Clinton Aero	3	---	---	---	---	---	3	---	---
Cochise Airlines, Inc.	9	---	---	---	3	---	6	---	---
Colson Airways	3	---	---	---	2	---	1	---	---
Com Air	17	---	---	---	7	---	10	---	---
Commuter Airlines	15	---	---	---	9	---	6	---	---
Copper State Airlines	2	---	---	---	---	---	2	---	---
Cumberland Airlines	8	---	---	---	1	---	7	---	---
Crown Air	15	---	---	---	3	---	12	---	---

TABLE 5.11 (Continued)

TOTAL AIRCRAFT IN OPERATION BY COMMUTER AIR TAXI OPERATORS, BY CARRIER, AND BY ENGINE TYPE: DECEMBER 1981

Name of Carrier	Total all Aircraft	Turbojet		Turbosube		Piston			Helicopter
		3-engine	2-engine	4-engine	2-engine	6-engine	2-engine	1-engine	
Dolphine Airways	4	---	---	---	4	---	---	---	---
DEL Airlines, Inc.	2	---	---	---	1	---	1	---	---
Direct Air	2	---	---	---	---	---	2	---	---
Eagle Airlines	2	---	---	---	---	---	2	---	---
Eagle Aviation	1	---	---	---	---	---	1	---	---
Emerald Airlines	9	---	5	---	4	---	---	---	---
Empire Airlines	6	---	---	---	5	---	1	---	---
Farrington Aviation	4	---	---	---	---	---	4	---	---
Fischer Bros. Aviation	5	---	---	---	3	2	---	---	---
Flamenco Airways	2	---	---	---	---	---	2	---	---
Frontier Flying Svc.	5	---	---	---	---	---	5	---	---
Gifford Aviation, Inc.	4	---	---	---	4	---	---	---	---
Golden Pacific Airlines	1	---	---	---	---	---	1	---	---
Golden West Airlines	14	---	---	5	9	---	---	---	---
Green Hills Aviation	2	---	---	---	---	---	2	---	---
Gulf Air Transport	6	---	---	---	5	---	1	---	---
Gulf Air, Inc.	8	---	---	---	---	---	8	---	---
Harbor Airlines	3	---	---	---	---	---	3	---	---
Henson Aviation	13	---	---	3	10	---	---	---	---
Hessauer Air Service Corp.	1	---	1	---	---	---	---	---	---
Horizon Ltd.	4	---	---	---	4	---	---	---	---
Imperial Commuter Airlines	6	---	---	---	6	---	---	---	---
Island Air Hawaii	1	---	---	---	1	1	---	---	---
Island Aviation, Inc.	3	---	---	---	3	---	---	---	---
Jamaire, Inc.	7	---	---	---	2	---	5	---	---
Key Airlines	2	---	---	---	2	---	---	---	---
Kodiak Western Alaska	2	---	---	---	1	1	---	---	---
Las Vegas Airlines	10	---	---	---	---	---	10	---	---
Macro Island Airways	7	---	---	---	---	---	7	---	---
Mall Airways	5	---	---	---	1	---	4	---	---
Mesa Aviation Service	2	---	---	---	---	---	2	---	---
Mesaba Aviation	2	---	---	---	2	---	---	---	---
Metro Airlines	29	---	---	---	29	---	---	---	---
Michigan Airlines, Inc.	6	---	---	---	3	---	3	---	---
Mid Pacific Airlines	5	---	---	---	5	---	---	---	---
Midstate Airlines	6	---	---	---	6	---	---	---	---
Mid South Airlines, Inc.	3	---	---	---	2	---	1	---	---
Mississippi Valley	14	---	---	---	14	---	---	---	---
Mountek Caribbean Airways	4	---	---	---	1	---	2	1	---
Mountain Home Air Service	5	---	---	---	---	---	3	2	---
Munz Northern Airlines, Inc.	7	---	---	---	---	---	7	---	---
New Air	9	---	---	---	3	---	6	---	---
New England Airlines Inc.	2	---	---	---	---	---	2	---	---
Northern Airlines	4	---	---	---	3	---	1	---	---
Oceania, Inc. incs	4	---	---	---	2	---	---	---	---
Orion Air, Inc.	17	7	---	---	10	---	---	---	---
Pacific Cal Air	1	---	---	---	1	---	---	---	---
Peninsula Airways Inc.	1	---	---	---	---	---	1	---	---
Pennsylvania Commuter	16	---	---	---	16	---	---	---	---
Phillips Airlines	5	---	---	---	---	5	---	---	---

TABLE 5.11 (Continued)

TOTAL AIRCRAFT IN OPERATION BY COMMUTER AIR TAXI OPERATORS, BY CARRIER, AND BY ENGINE TYPE: DECEMBER 1981

Name of Carrier	Total all Aircraft	Turbojet		Turboprop		Piston			Helicopter
		3-engine	2-engine	4-engine	2-engine	4-engine	2-engine	1-engine	
Pilgrim Airlines	9	---	---	---	9	---	---	---	---
Pioneer Airways	7	---	---	---	7	---	---	---	---
Pocono Airlines	4	---	---	---	4	---	---	---	---
Ponderosa Avn & Airlines	1	---	---	---	---	---	1	---	---
Precision Airlines	11	---	---	---	6	---	5	---	---
Priceville Airways	2	---	---	---	2	---	---	---	---
Providence Air Charter	7	---	---	---	---	---	7	---	---
Provincetown Boston Air	46	---	---	---	6	---	40	---	---
Puerto Rico Int'l Airlines	22	---	---	---	3	19	---	---	---
Ransome Airlines	15	---	---	6	9	---	---	---	---
Rio Airways	21	---	---	---	21	---	---	---	---
Rocky Mountain Airways	7	---	---	3	4	---	---	---	---
Ross Aviation, Inc.	3	---	---	---	3	---	---	---	---
Royale Airlines, Inc.	12	---	---	---	12	---	---	---	---
Royal Hawaiian Air Service	15	---	---	---	---	---	15	---	---
Royal American Airways	1	---	---	1	---	---	---	---	---
San Juan Airlines	8	---	---	---	---	---	8	---	---
Scenic Airlines	22	---	---	---	---	---	22	---	---
Scottsdale Charter, Inc.	7	---	---	---	1	---	6	---	---
Sea Airmotive	22	---	---	---	13	---	---	---	---
Semo Aviation, Inc.	2	---	---	---	---	---	2	---	---
SFO Helicopter Airlines	2	---	---	---	---	---	---	2	---
Silver State Airlines, Inc.	6	---	---	---	2	---	4	---	---
Simmons Aviation	6	---	---	---	4	---	2	---	---
Skyways, Inc.	15	---	---	---	13	---	2	---	---
Sky West Aviation	8	---	---	---	3	---	5	---	---
SMB Stage Lines	12	---	---	---	10	---	2	---	---
South Central Air, Inc.	4	---	---	---	---	---	4	---	---
Southeastern Commuter Airlines	3	---	---	---	1	---	2	---	---
South Pacific Island Airways	2	---	---	---	2	---	---	---	---
State Airlines, Inc.	3	---	---	---	---	---	3	---	---
Sunbird Airlines, Inc.	16	---	---	---	6	---	10	---	---
Sun International Airways	1	---	---	---	---	---	1	---	---
Susquehanna Airlines	3	---	---	---	---	---	3	---	---
Tennessee Airways, Inc.	6	---	---	---	3	---	3	---	---
Texas Star	1	---	---	---	---	---	1	---	---
Trans Colorado Airlines	2	---	---	---	2	---	---	---	---
Trans Missouri Airlines	2	---	---	---	---	---	2	---	---
Trans Western Airlines of Utah	11	---	---	---	4	---	7	---	---
Tri-State Flight Service	8	---	---	---	---	---	8	---	---
Unalakleet Air Taxi	5	---	---	---	---	---	5	---	---
Valdez Airlines	3	---	---	---	1	---	2	---	---
Vieques Air Link	3	---	---	---	---	---	3	---	---
Walker's Clay Air Terminal	3	---	---	---	1	---	2	---	---
Westair	9	---	---	---	---	---	9	---	---
Western Yukon Air	1	---	---	---	---	---	1	---	---
Wheeler Airlines, Inc.	2	---	---	---	2	---	---	---	---
Willis Air	5	---	---	---	3	---	5	---	---
Wings West, Inc.	11	---	---	---	---	---	8	---	---
Unknown	4	---	---	---	---	---	4	---	---

TABLE 5.12

AIRCRAFT IN OPERATION BY COMPUTER AIR TAXI OPERATORS,
BY MANUFACTURER AND MODEL: DECEMBER 1979-1981
(MULTI-ENGINE AIRCRAFT IN PASSENGER OPERATIONS ONLY)

Aircraft Make and Model	1979	1980	1981
Total Aircraft	495	835	970
Fixed Wing Total	495	835	968
Turbojet--total	---	9	14
4-engine	---	4	---
Douglas DC8	---	4	---
3-engine	---	---	7
Boeing 727	---	---	7
2-engine	---	5	7
Cessna C500	---	---	1
Douglas DC9	---	3	5
Fokker F28	---	2	---
Gruuman G1159	---	---	1
Turboprop--total	177	375	488
4-engine	5	8	18
DeHavilland DH7	5	8	17
Vickers Viscount 745	---	---	1
2-engine	172	367	470
Beech BE90	3	2	2
Beech BE99	50	82	101
Beech BE200	1	1	---
Cessna C441	---	1	---
Construcciones Aeronauticas C212	---	2	15
Convair CV580	2	12	22
Convair CV600/640	2	10	13
DeHavilland DH6	56	90	88
DeHavilland DH104	1	---	---
Embraer EMB 110	4	34	66
Fairchild F27	---	1	9
Fairchild FH227	---	2	6
Fokker F27	---	1	---
GAF Nomad N22	---	9	2
GAF Nomad N24	1	---	---
Gruuman G159	---	9	13
Gulf Stream C73	---	---	1
Handley-Page HP137	8	8	5
Israel Aircraft Arava 101B	---	---	2
Mitsubishi T211	---	---	5
Nord ND 262	9	8	8
Nord STC 262	4	4	7
Piper PA31T	---	---	1
Short SD3	---	29	34
Short SC7	---	2	2
Short SD 330	7	---	---
Swearingen SA26	1	---	---
Swearingen SA226	23	61	62
Swearingen SA227	---	---	4
Piston--total	318	651	466
4-engine	4	24	22
DeHavilland DH114	4	24	21
Douglas DC4	---	---	1

TABLE 5.12 (Continued)

AIRCRAFT IN OPERATION BY COMMUTER AIR TAXI OPERATORS,
BY MANUFACTURER AND MODEL: DECEMBER 1979-1981
(MULTI-ENGINE AIRCRAFT IN PASSENGER OPERATIONS ONLY)

Aircraft Make and Model	1979	1980	1981
2-engine	<u>313</u>	<u>427</u>	<u>441</u>
Aero Commander AC500	1	3	1
Aero Commander AC680	2	3	1
Beech BE18	18	10	13
Beech BE55	3	2	2
Beech BE58	---	3	3
Beech BE65	2	1	4
Beech BE80	1	2	---
Beech BE95	1	1	1
Beech STC18	---	3	---
Britten-Norman BN2.	11	31	
Cessna C310	11	7	
Cessna C337	2	---	
Cessna C340	2	2	
Cessna C401	---	2	
Cessna C402	92	115	
Cessna C404	17	20	
Cessna C411	1	1	
Cessna C414	2	1	3
Cessna C421	---	1	---
Convair CV240	---	3	7
Convair CV340	---	1	2
Convair CV440	---	5	4
Curtiss-Wright CW46	---	1	1
De Havilland DH104	---	---	2
Douglas DC3	2	20	21
Dornier DO28	1	1	2
Grumman G21	1	6	1
Grumman G73	---	4	1
Gulf Stream G44	---	---	1
Martin M404	---	11	11
Piper PA23	15	26	19
Piper PA30	2	2	2
Piper PA31.	112	126	138
Piper PA34.	10	12	15
Piper PA44.	1	1	1
Piper PA600	3	---	---
1-engine.	---	---	3
Beech B36	---	---	1
Piper PA32.	---	---	2
Rotary wing total.	---	---	2
Turbine	---	---	2
Bell Helicopter HB206	---	---	2

TABLE 5.13

TOTAL AIRCRAFT IN OPERATION BY AIR TAXI OPERATORS,
BY CARRIER, AND BY ENGINE TYPE: DECEMBER 1981
(LARGE AIRCRAFT ONLY)

Name of Carrier	Total all Aircraft	Turbojet			Turboprop	Piston		Helicopter
		4-engine	3-engine	2-engine		4-engine	2-engine	
Total	117	---	16	6	32	5	56	2
Aero-Dyne Corp.	2	---	---	---	---	---	2	---
Aero Transit	3	---	---	---	---	---	3	---
Aero Virgin Island	4	---	---	---	---	---	4	---
Air Cargo American	1	---	---	---	---	---	1	---
Air Pennsylvania Ltd.	4	---	---	---	---	---	4	---
American Cyanamid Co.	2	---	---	2	---	---	---	---
American Inter-Island	5	---	---	---	---	---	5	---
Apollo Airways, Inc.	5	---	---	---	5	---	---	---
Basler Flight Service	6	---	---	---	---	1	5	---
Caribbean Air Service	3	---	---	---	---	---	3	---
Century Airlines	3	---	---	---	---	---	3	---
Columbia Helicopters	2	---	---	---	---	---	---	2
Consolidated Airways	3	---	---	---	3	---	---	---
Crystal Shamrock	2	---	---	---	---	---	2	---
DHL Cargo	6	---	---	---	---	4	2	---
Florida Airmotive	2	---	---	---	---	---	2	---
International Air Service	9	---	7	2	---	---	---	---
Interstate Airlines	18	---	9	---	9	---	---	---
Jet Fleet Corp.	1	---	---	1	---	---	---	---
Key Airlines	4	---	---	---	---	---	4	---
Merl Norman Cosmetics Aviation	1	---	---	1	---	---	---	---
Pinehurst Airlines	2	---	---	---	2	---	---	---
Princeton Airways, Inc.	5	---	---	---	1	---	4	---
Red Carpet Flying Service	3	---	---	---	---	---	3	---
Sierra Pacific Airlines	4	---	---	---	4	---	---	---
Southern Flyer	2	---	---	---	---	---	2	---
Suburban Airlines Inc.	5	---	---	---	5	---	---	---
Trans Florida Airlines	2	---	---	---	---	---	2	---
Tropic Air Limited	3	---	---	---	---	---	3	---
Viking International	5	---	---	---	3	---	2	---

TABLE 5.14

AIRCRAFT IN OPERATION BY AIR TAXI OPERATORS BY
MANUFACTURER AND MODEL: December 1978 through 1981
(LARGE AIRCRAFT ONLY)

Aircraft Make and Model	1978	1979	1980	1981	Aircraft Make and Model	1978	1979	1980	1981
Total Aircraft	337	352	135	117	DeHavilland DH6	—	4	3	2
Fixed-wing--total	337	351	133	115	DeHavilland DH104	—	1	—	—
Turbojet--total	96	52	29	22	Fairchild FH27	—	3	—	—
4-engine--total	—	2	—	—	GAF Nomad N22	—	—	—	1
Boeing B720	—	1	—	—	Grumman G159	7	14	6	3
Boeing B707	—	1	—	—	Handley-Page HP137	—	5	5	5
3-engine--total	9	—	—	16	Nihon YS11	—	6	5	2
Boeing B727	9	—	—	16	Nord ND262	20	11	—	—
2-engine--total	87	50	29	6	Short SD330	4	13	—	—
Cessna C500	—	4	—	—	Short SD3	4	—	5	5
Dassault MD20	45	12	10	3	Swearingen SA226	—	13	—	—
DeHavilland DH125	1	—	—	—	Piston--total	183	159	67	61
Douglas DC9	1	—	—	—	4-engine--total	5	6	4	5
Grumman G1159	6	6	5	2	Douglas DC4	2	—	1	1
Hamburger/Flugzenbau HR320	6	4	—	—	Douglas DC6	2	3	3	4
Israel Aircraft 1123	1	1	—	—	DeHavilland DH114	—	3	—	—
Israel Aircraft 1124	1	1	1	—	2-engine--total	177	153	63	56
Learjet LR23	1	3	—	—	Beech BE18	—	—	1	5
Learjet LR24	—	2	1	—	Britten-Norman BN2	—	—	—	4
Learjet LR25	13	5	7	1	Cessna C402	—	1	—	1
Learjet LR35	8	4	3	—	Convair CV240	2	1	1	2
Rockwell Int'l NA265	4	2	2	—	Convair CV340/440	22	15	12	11
Sud Aviation SE210	—	6	—	—	Curtiss-Wright CW46	5	6	6	4
Turboprop--total	58	140	37	32	DeHavilland DH4	1	1	1	—
4-engine--total	7	—	—	—	Douglas DC3	130	77	38	26
DeHavilland DHC7	1	—	—	—	Martin M404	16	20	3	—
Lockheed L188	6	—	—	—	Piper PA23	—	3	—	—
2-engine--total	51	140	37	32	Piper PA31	—	10	—	3
Beech 899	—	35	—	—	Piper 600AS	—	11	1	—
Beech 8200	—	3	—	—	1-engine--total	1	—	—	—
Convair CV580	12	23	11	11	Cessna C210	1	—	—	—
Convair CV600	4	9	2	3	Rotary Wing--total	—	1	2	2
DeHavilland DH6	—	4	—	—	Turbine--total	—	1	2	2
DeHavilland DH104	—	1	—	—	Kawasaki KV107	—	1	2	—
Fairchild FH27	—	3	—	—	Sikorsky S76	—	—	—	2

TABLE 5.15

TOTAL AIRCRAFT IN OPERATION BY ALL CARGO AIR SERVICE OPERATORS,
 BY CARRIER, AND BY ENGINE TYPE: DECEMBER 1981
 (LARGE AIRCRAFT ONLY)

Name of Carrier	Total	Turbojet			Turboprop			Piston		
		4-engine	3-engine	2-engine	4-engine	2-engine	4-engine	2-engine	Piston	
Total	152	8	40	34	10	19	17	17	26	
Aero Union Corp.	1	—	—	—	—	—	—	1	—	
Airborn Express, Inc.	23	—	—	—	10	—	13	—	—	
Air Express Int'l Airlines, Inc.	2	—	—	—	—	2	—	1	7	
Bo-S-Aire Corporation	8	—	—	—	—	—	—	—	9	
Combs Freight air	9	—	—	—	—	—	—	—	—	
Federal Express	57	—	—	—	24	—	8	—	—	
Fleming Int'l Airways	11	1	2	—	—	—	—	—	3	
General Aviation, Inc.	3	—	—	—	—	—	—	—	2	
Northern Air Cargo	7	—	—	—	—	—	1	3	—	
Pacific Alaska Airlines	4	—	—	—	—	—	—	—	—	
Rosenblum Aviation	7	7	—	—	—	—	—	—	—	
Ryan Aviation, Inc.	5	—	—	—	5	—	—	—	—	
Summit Airlines	5	—	—	—	—	—	—	—	7	
Trans Continental Airlines	10	—	—	—	—	—	—	—	3	

TABLE 5.16

AIRCRAFT IN OPERATION BY ALL CARGO AIR SERVICE
OPERATORS, BY MANUFACTURER AND MODEL:
DECEMBER 1979-1981
(LARGE AIRCRAFT ONLY)

Aircraft Make and Model	1979	1980	1981
Total	<u>93</u>	<u>146</u>	<u>152</u>
Turbojet--total	<u>60</u>	<u>76</u>	<u>82</u>
4-engine	<u>8</u>	<u>7</u>	<u>8</u>
Douglas DC8	<u>8</u>	<u>7</u>	<u>8</u>
3-engine	<u>15</u>	<u>24</u>	<u>40</u>
Boeing B727	<u>15</u>	<u>21</u>	<u>36</u>
Douglas DC10	—	<u>3</u>	<u>4</u>
2-engine	<u>37</u>	<u>45</u>	<u>34</u>
Boeing B737	<u>5</u>	<u>5</u>	<u>0</u>
Dassault MD20	<u>32</u>	<u>32</u>	<u>24</u>
Douglas DC9	—	—	<u>6</u>
Sud Aviation SE210.	—	<u>5</u>	<u>2</u>
Sud Aviation SN601.	—	<u>3</u>	<u>2</u>
Turboprop--total	<u>14</u>	<u>24</u>	<u>29</u>
4-engine	<u>9</u>	<u>9</u>	<u>10</u>
Canadair CL44	—	<u>1</u>	<u>2</u>
Lockheed L188	<u>9</u>	<u>8</u>	<u>8</u>
2-engine	<u>5</u>	<u>15</u>	<u>19</u>
Convair CV580	<u>5</u>	<u>5</u>	<u>5</u>
Ninon YS11.	—	<u>8</u>	<u>13</u>
Fairchild F27	—	<u>2</u>	<u>1</u>
Piston--total	<u>19</u>	<u>46</u>	<u>41</u>
4-engine	<u>3</u>	<u>20</u>	<u>17</u>
Douglas DC4	<u>3</u>	<u>3</u>	<u>2</u>
Douglas DC6	—	<u>17</u>	<u>15</u>
2-engine	<u>16</u>	<u>26</u>	<u>24</u>
Beach BE18	—	<u>2</u>	<u>2</u>
Cessna C500	—	<u>5</u>	—
Convair CV240	—	—	<u>3</u>
Convair CV440	<u>7</u>	<u>8</u>	<u>9</u>
Curtis Wright C46	—	<u>3</u>	<u>3</u>
Douglas DC 3	<u>9</u>	<u>6</u>	<u>5</u>
Fairchild C82	—	<u>2</u>	<u>2</u>

TABLE 5.17

AIRCRAFT IN OPERATION BY AIR TRAVEL CLUBS BY
CARRIER AND BY ENGINE TYPE:
DECEMBER 1981

Name of Carrier	Total Aircraft	Turbojet		Turboprop
		4-engine	3-engine	4-engine
Total	<u>11</u>	<u>9</u>	<u>1</u>	<u>1</u>
Emerald Shillelagh Chowder and Marching Society, Inc.	1	—	—	1
Jet Set Travel Club	1	1	—	—
Nomads	1	1	—	—
Ports of Call Travel Club	8	7	1	—

TABLE 5.18

AIRCRAFT IN OPERATION BY TRAVEL CLUBS, BY MANUFACTURER AND MODEL:
DECEMBER 1979-1981
(LARGE AIRCRAFT ONLY)

Aircraft Make and Model	1979	1980	1981
Total	<u>15</u>	<u>12</u>	<u>11</u>
Turbojet--total	<u>12</u>	<u>9</u>	<u>10</u>
4-engine	<u>6</u>	<u>4</u>	<u>9</u>
Boeing B707	—	2	4
Boeing B720	4	2	1
Convair CV30	6	5	4
Douglas DC8	2	—	—
3-engine	—	—	<u>1</u>
Boeing B727	—	—	1
Turboprop--total	<u>3</u>	<u>3</u>	<u>1</u>
4-engine	<u>3</u>	<u>3</u>	<u>1</u>
Lockheed L1011	3	3	1

VI. U.S. CIVIL CARRIER OPERATING DATA

The air carrier data contained in this chapter were obtained from the following sources published by the Bureau of Accounts and Statistics at the Civil Aeronautics Board:

Financial Data--Air Carrier Financial Statistics, published quarterly.

Traffic Data--Air Carrier Traffic Statistics, published monthly.

Beginning with the January 1981 issue of the CAB publication "Air Carrier Traffic Statistics" new carrier groupings have been established. The changing nature of airline operations under deregulation necessitated a reevaluation and restructuring of air carrier groupings for statistical and financial data aggregation and analysis. The Board's decision to establish new groupings was based on findings contained in the Summary Report of the Regulatory Information Planning Project, adopted by the Board on October 2, 1980. The Board sanctioned the elimination of the pre-deregulation or historical carrier groupings and adopted newly defined groupings based on size, as measured by total operating revenue as listed below.

<u>Carrier Groups</u>	<u>Carriers with Annual Operating Revenues of:</u>
Majors	\$1,000,000,000+
Nationals	\$75,000,000 - \$1,000,000,000
Large Regionals	\$10,000,000 - \$74,999,999
Medium Regionals	0 - \$9,999,999

The data herein are classified in two broad operational categories: namely "domestic" and "international." Beginning January 1, 1981, "domestic" encompasses operations within and between the 50 states of the United States, the District of Columbia, the Commonwealth of Puerto Rico and the United States Virgin Islands. It also encompasses Canadian transborder operations and for certain carriers, Mexican transborder operations. All other operations are considered "international." For periods prior to January 1, 1981, the data are classified in this same manner, except statistics for Puerto Rico and Virgin Islands operations are included in the international category rather than the domestic.

All changes are stated on a percentage basis, including those relating to load factors. Changes in the magnitude of 1,000 or more are shown as 999.9*. Changes relating to computed items (averages, load factors, etc.) are calculated from computations refined to more decimal places than are shown in this report.

TABLE 6-1

TRAFFIC DATA, ALL SERVICES (SCHEDULED AND NONSCHEDULED)
OF THE CERTIFIED ROUTE AIR CARRIERS:
1980 AND 1981

TRAFFIC CATEGORY	Total All Services		Total Domestic Service		Total International	
	1980(R)	1981(P)	1980(R)	1981(P)	1980(R)	1981(P)
REVENUE PASSENGER MILES Flown (000)	267,721,986	259,767,025	204,367,599	201,296,702	63,354,387	58,470,323
AVAILABLE SEAT-MILES (000)	448,478,567	438,344,868	350,716,595	349,614,256	97,761,972	88,730,612
REVENUE PASSENGER ENPLANEMENTS (000)	301,696	290,090	275,182	267,044	26,514	23,046
REVENUE TON-MILES Flown (000)*	34,655,519	33,825,088	24,954,919	24,786,941	9,689,068	9,087,970
PASSENGER	26,772,290	25,976,700	20,436,596	20,129,661	6,335,694	5,847,039
FREIGHT	6,485,178	6,457,080	3,525,304	3,593,202	2,958,332	2,863,701
EXPRESS	55,949	67,974	53,825	66,326	2,120	1,648
U.S. MAIL	1,318,496	1,347,498	946,705	995,130	371,791	352,368
FOREIGN MAIL	23,611	25,842	2,484	2,624	21,127	23,218
REVENUE AIRCRAFT-MILES Flown (000)	2,924,234	2,793,454	2,523,375	2,439,583	400,791	353,860

(P) PRELIMINARY

(R) REVISED

*DETAILS MAY NOT ADD TO TOTAL DUE TO ROUNDING.

NOTE: SEE INTRODUCTORY PAGE AT THE BEGINNING OF THIS CHAPTER REGARDING SIGNIFICANT CHANGES
IN THE DATA NOW BEING REPORTED BY THE CIVIL AERONAUTICS BOARD.

TABLE 6.2

REVENUE AIRCRAFT DEPARTURES, MILES AND HOURS FLOWN, AND AVERAGE SPEED IN ALL
DOMESTIC SERVICES OF THE CERTIFICATED ROUTE AIR CARRIERS: 1972 - 1981

YEAR	REVENUE AIRCRAFT DEPARTURES*	REVENUE AIRCRAFT MILES FLOWN (000)	REVENUE AIRCRAFT HOURS FLOWN	AVERAGE AIRBORNE SPEED (MILES PER HOUR)
1972	4,737,343	1,999,530	4,944,515	404
1973	4,820,409	2,097,883	5,183,453	405
1974	4,449,633	1,938,041	4,820,918	402
1975	4,456,146	1,947,660	4,826,355	404
1976	4,598,152	2,051,614	5,047,504	406
1977	4,798,591	2,161,952	5,296,101	408
1978	4,874,565	2,249,102	5,449,292	413
1979(R)	5,232,381	2,471,401	6,090,313	406
1980(R)	5,222,879	2,523,375	6,247,795	404
1981(P)	5,088,155	2,439,583	6,071,929	402

* REVENUE AIRCRAFT DEPARTURES FIGURES PRIOR TO 1977 DO NOT INCLUDE NONSCHEDULED SERVICES.

(R) REVISED

(P) PRELIMINARY

NOTE: SEE INTRODUCTORY PAGE AT THE BEGINNING OF THIS CHAPTER REGARDING SIGNIFICANT CHANGES IN
THE DATA NOW BEING REPORTED BY THE CIVIL AERONAUTICS BOARD.

TABLE 6.3

REVENUE AIRCRAFT DEPARTURES, MILES AND HOURS FLOWN, AND AVERAGE SPEED IN ALL INTERNATIONAL SERVICE OF THE CERTIFICATED ROUTE AIR CARRIERS: 1972 - 1981

YEAR	REVENUE AIRCRAFT DEPARTURES*	REVENUE AIRCRAFT MILES FLOWN (000)	REVENUE AIRCRAFT HOURS FLOWN	AVERAGE AIRBORNE SPEED (MILES PER HOUR)
1972	309,095	376,346	783,581	480
1973	314,168	457,840	947,824	483
1974	276,468	412,830	856,782	482
1975	248,564	377,033	781,003	483
1976	236,067	368,070	762,131	484
1977	323,205	363,088	745,575	487
1978	301,802	359,260	735,334	489
1979(R)	253,821	387,737	788,598	492
1980(R)	256,415	400,791	819,518	489
1981(P)	225,322	353,860	723,907	489

* REVENUE AIRCRAFT DEPARTURES FIGURES PRIOR TO 1977 DO NOT INCLUDE NONSCHEDULED SERVICE.

(R) REVISED

(P) PRELIMINARY

NOTE: SEE INTRODUCTORY PAGE AT THE BEGINNING OF THIS CHAPTER REGARDING SIGNIFICANT CHANGES IN THE DATA NOW BEING REPORTED BY THE CIVIL AERONAUTICS BOARD.

TABLE 6.4

TOTAL TON-MILES AVAILABLE IN ALL SERVICES OF THE
UNITED STATES AIR CARRIERS: 1972 - 1981
(THOUSANDS OF TON-MILES)

YEAR	TOTAL AVAILABLE TON-MILES*	CERTIFICATED ROUTE AIR CARRIERS			SUPPLEMENTAL AIR CARRIERS
		TOTAL*	DOMESTIC SERVICES	INTERNATIONAL SERVICES	
1972	50,867,516	48,680,473	34,877,554	13,802,919	2,187,043
1973	53,966,736	51,443,758	37,371,558	14,072,200	2,522,978
1974	51,153,441	48,941,526	35,565,908	13,375,618	2,211,915
1975	51,215,945	49,288,695	36,511,214	12,777,481	1,927,250
1976	53,521,569	51,708,842	38,819,097	12,889,745	1,812,727
1977	56,775,493	54,789,077	41,412,289	13,376,788	1,986,416
1978	58,907,436	56,869,894	43,557,208	13,312,686	2,037,542
1979	64,359,580	62,545,477	47,339,854	15,205,593	1,814,103
1980(R)	66,136,708	66,162,896	49,396,481	16,763,237	1,746,505
*1981(P)	**	64,149,951	48,646,285	15,502,958	**

(P) PRELIMINARY

(R) REVISED.

* CATEGORIES MAY NOT ADD TO TOTAL DUE TO ROUNDING.

** DATA NO LONGER AVAILABLE.

NOTE: SEE INTRODUCTORY PAGE AT THE BEGINNING OF THIS CHAPTER REGARDING SIGNIFICANT CHANGES IN
THE DATA NOW BEING REPORTED BY THE CIVIL AERONAUTICS BOARD.

TABLE 6.5

REVENUE TON-MILES FLOWN IN ALL SERVICES BY CERTIFICATED ROUTE
AIR CARRIERS OF THE UNITED STATES: 1972 - 1981
(THOUSANDS OF TONS)

YEAR	CERTIFICATED ROUTE AIR CARRIERS		
	TOTAL*	DOMESTIC OPERATIONS	INTERNATIONAL OPERATIONS
1972	22,805,371	15,584,558	7,220,813
1973	23,927,657	16,707,015	7,220,642
1974	23,900,208	16,999,202	6,901,006
1975	23,533,743	17,069,474	6,464,269
1976	25,709,152	18,801,891	6,907,261
1977	27,582,374	20,268,464	7,313,910
1978	31,095,184	23,151,995	7,943,189
1979	34,550,392	25,676,130	8,874,792
1980(R)	34,655,519	24,964,909	9,689,068
1981(P)	33,875,088	24,786,941	9,087,970

* CATEGORIES MAY NOT ADD TO TOTAL DUE TO ROUNDING.

(P) PRELIMINARY

(R) REVISED.

NOTE: SEE INTRODUCTORY PAGE AT THE BEGINNING OF THIS CHAPTER REGARDING
SIGNIFICANT CHANGES IN THE DATA NOW BEING REPORTED BY THE CIVIL
AERONAUTICS BOARD.

TABLE 6.6

PASSENGER OPERATIONS IN SCHEDULED DOMESTIC SERVICE OF
CERTIFICATED ROUTE AIR CARRIERS: 1972 - 1981

YEAR	REVENUE PASSENGER ENPLANEMENTS (000)	REVENUE PASSENGER MILES (000)	AVAILABLE SEAT-MILES (000)	REVENUE PASSENGER LOAD FACTOR*	AVERAGE ON-LINE PASSENGER TRIP-LENGTH (MILES)	AVERAGE PASSENGER REVENUE PER PASSENGER-MILES (CENTS)
1972	172,452	118,137,978	226,614,145	52.1	685	6.40
1973	183,272	126,317,334	244,699,119	51.6	689	6.63
1974	189,733	129,732,395	233,880,101	55.5	684	7.52
1975	188,746	131,728,492	241,282,125	54.6	698	7.69
1976	206,279	143,271,283	261,247,796	54.8	704	8.16
1977	222,283	156,609,249	280,618,915	55.8	704	8.61
1978	253,957	182,669,238	299,541,841	61.0	719	8.49
1979	292,700	208,890,884	332,796,130	62.8	714	8.93
1980(R)	275,182	204,367,599	350,716,595	58.0	736	8.85
1981(P)	267,044	201,296,702	349,614,256	57.4	749	7.90

(P) PRELIMINARY

(R) REVISED

*PERCENT REVENUE PASSENGER-MILES OF AVAILABLE SEAT-MILES.

NOTE: SEE INTRODUCTORY PAGE AT THE BEGINNING OF THIS CHAPTER REGARDING SIGNIFICANT
CHANGES IN THE DATA NOW BEING REPORTED BY THE CIVIL AERONAUTICS BOARD.

TABLE 6.7

PASSENGER OPERATIONS IN SCHEDULED INTERNATIONAL SERVICE OF
THE CERTIFICATED ROUTE AIR CARRIERS: 1972 - 1981

YEAR	REVENUE PASSENGER ENPLANEMENTS (000)	REVENUE PASSENGER MILES (000)	AVAILABLE SEAT-MILES (000)	REVENUE PASSENGER LOAD FACTOR (PERCENT)*	AVERAGE ON-LINE PASSENGER TRIP-LENGTH (MILES)	AVERAGE PASSENGER REVENUE PER PASSENGER-MILES (CENTS)
1972	18,897	34,268,298	60,797,069	56.4	1,813	4.98
1973	18,936	35,639,973	65,897,988	54.1	1,882	5.32
1974	17,725	33,186,199	63,125,961	52.6	1,872	6.39
1975	16,316	31,081,668	61,724,118	50.4	1,905	7.17
1976	17,039	33,716,743	61,573,853	54.8	1,979	7.15
1977	18,043	36,609,570	64,946,986	56.4	2,029	7.61
1978	20,759	44,111,944	69,208,878	63.7	2,125	7.49
1979	24,163	53,132,491	83,330,299	63.8	2,199	7.66
1980(R)	26,514	63,354,387	97,761,972	62.8	2,258	13.26
1981(P)	23,046	58,470,323	88,730,612	63.7	2,432	12.3

(P) PRELIMINARY

(R) REVISED

*PERCENT REVENUE PASSENGER-MILES OF AVAILABLE SEAT-MILES.

NOTE: SEE INTRODUCTORY PAGE AT THE BEGINNING OF THIS CHAPTER REGARDING SIGNIFICANT
CHANGES IN THE DATA NOW BEING REPORTED BY THE CIVIL AERONAUTICS BOARD.

TABLE 6.8

REVENUE AIRCRAFT-MILES FLOWN IN ALL SERVICES OF CERTIFICATED
 ROUTE AIR CARRIERS: 1972 - 1981
 (THOUSANDS OF TONS)

YEAR	TOTAL*	DOMESTIC OPERATIONS	INTERNATIONAL OPERATIONS
1972	2,375,878	1,999,530	376,346
1973	2,448,113	2,057,745	390,369
1974	2,258,188	1,900,584	357,604
1975	2,240,506	1,909,486	331,020
1976	2,319,967	2,001,357	318,610
1977	2,418,645	2,103,798	314,847
1978	2,608,362	2,249,102	359,260
1979	2,859,138	2,471,401	387,737
1980(R)	2,924,234	2,523,375	400,791
1981(P)	2,793,454	2,439,583	353,860

*DETAILS MAY NOT ADD TO TOTAL DUE TO ROUNDING.

(P) PRELIMINARY

(R) REVISED

NOTE: SEE INTRODUCTORY PAGE AT THE BEGINNING OF THIS CHAPTER REGARDING
 SIGNIFICANT CHANGES IN THE DATA NOW BEING REPORTED BY THE CIVIL
 AERONAUTICS BOARD.

TABLE 6-9
U.S. SUPPLEMENTAL AIR CARRIER OPERATIONS: 1977 - 1981

ITEM	1977	1978	1979	1980	1981
REVENUE AIRCRAFT MILES (000)	62,774	69,946	63,088	56,783	
COMMERCIAL	38,306	46,355	42,721	33,022	
MILITARY	24,468	23,591	20,367	23,761	
REVENUE PASSENGER ORIGINATIONS (000)	2,192	2,951	2,591	1,718	DATA
REVENUE PASSENGER MILES (000)	8,199,053	9,999,037	8,956,918	7,235,410	
COMMERCIAL	6,647,466	8,297,453	6,912,819	4,878,393	
MILITARY	1,551,587	1,701,584	2,044,099	2,357,017	
AVAILABLE SEAT-MILES (000)	9,264,160	11,347,569	10,363,568	9,834,132	NO
REVENUE CARGO TON-MILES (000)	384,133	372,650	332,119	341,425	
COMMERCIAL	159,242	163,516	184,161	155,728	
MILITARY	224,891	209,134	147,958	185,643	
AVAILABLE TON-MILES	1,812,727	2,037,542	1,814,103	1,746,505	LONGER
OPERATING REVENUE (\$000)	417,480	529,654	561,913	787,765	
TRANSPORT	398,656	506,388	538,271	770,692	
CONTRACT AND CHARTER					
COMMERCIAL	291,181	380,155	366,378	376,502	
MILITARY	107,237	123,437	135,934	225,491	
OTHER	239	2,796	35,959	140,113	
OTHER THAN TRANSPORT	18,827	23,262	23,639	17,070	
OPERATING EXPENSES (\$000)	418,086	512,465	559,735	779,145	AVAILABLE
OPERATING PROFIT OR LOSS (\$000)	(-599)	17,195	2,175	8,619	
NUMBER OF OPERATORS	7	8	7	14	

*SCHEDULED OPERATIONS BEGAN MAY 1, 1979

NOTE: SEE INTRODUCTORY PAGE AT THE BEGINNING OF THIS CHAPTER REGARDING SIGNIFICANT CHANGES IN THE DATA NOW BEING REPORTED BY THE CIVIL AERONAUTICS BOARD.

TABLE 6-10

OPERATING REVENUE OF DOMESTIC PASSENGER/CARGO OPERATORS,
 CERTIFIED ROUTE AIR CARRIERS: 1972 - 1981
 (THOUSANDS OF DOLLARS)

YEAR	TOTAL OPERATING REVENUES*		PASSENGER		U.S. MAIL (INCLUDING SUBSIDY)		EXPRESS AND FREIGHT		EXCESS BAGGAGE		OTHER	
	AMOUNT	PERCENT	AMOUNT	PERCENT	AMOUNT	PERCENT	AMOUNT	PERCENT	AMOUNT	PERCENT	AMOUNT	PERCENT
1972	8,587,996	100.0	7,564,841	88.1	228,031	2.7	541,346	6.3	-2,842	0.1	240,936	2.8
1973	9,604,652	100.0	8,379,396	87.3	257,745	2.7	615,099	6.4	14,289	0.1	338,124	5.5
1974	11,448,289	100.0	9,757,503	85.2	259,419	2.3	672,957	5.9	16,581	0.1	741,829	6.5
1975	11,910,894	100.0	10,113,091	84.9	185,336	1.6	696,135	5.8	18,863	0.2	897,469	7.5
1976	13,789,178	100.0	11,855,266	86.0	214,125	1.6	830,051	6.0	22,014	0.2	867,722	6.3
1977	15,690,236	100.0	13,489,111	86.0	277,518	1.7	960,857	6.1	20,913	0.1	941,837	6.1
1978	17,943,472	100.0	15,508,727	86.4	266,826	1.3	1,093,767	6.1	22,900	0.1	1,051,252	5.8
1979	21,336,853	100.0	18,719,830	87.7	328,542	1.5	1,161,845	5.4	27,681	0.1	1,098,939	5.2
1980	26,012,346	100.0	23,068,236	88.7	438,236	1.7	1,204,460	4.6	32,134	0.1	1,264,810	4.9
1981	**	**	**	**	**	**	**	**	**	**	**	**

*DETAILS MAY NOT ADD TO TOTAL DUE TO ROUNDING.

**NOT AVAILABLE DUE TO NEW REPORTING PROCEDURES BY CIVIL AERONAUTICS BOARD. SEE TABLE 6-14 FOR NEW DATA AND SEE EXPLANATION IN INTRODUCTION OF CHAPTER.

TABLE 6.11
OPERATING EXPENSES OF DOMESTIC PASSENGER/CARGO OPERATORS,
CERTIFIED ROUTE AIR CARRIERS: 1972 - 1981
(THOUSANDS OF DOLLARS)

YEAR	AIRCRAFT OPERATING EXPENSES				GROUNDS AND INDIRECT EXPENSE				NET OPERATING INCOME OR LOSS AMOUNT		
	FLIGHT OPERATIONS		Maintenance Equipment	DEPRECIATION AND AMORTIZATION FLIGHT EQUIPMENT AND OTHER	Amount	Percent	Amount	Percent			
TOTAL OPERATING EXPENSES*	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent			
1972	8,096,695	100.0	2,324,560	28.7	1,239,456	15.3	773,823	9.6	3,758,854	46.4	491,300
1973	9,116,173	100.0	2,605,723	28.6	1,392,007	15.3	834,607	9.2	4,278,836	46.9	488,479
1974	10,648,991	100.0	3,297,164	51.0	1,493,920	14.1	865,229	8.1	4,986,680	46.8	799,289
1975	11,781,406	100.0	3,869,405	32.8	1,595,358	13.6	882,569	7.5	5,434,073	46.1	129,488
1976	13,231,448	100.0	4,401,280	33.3	1,802,164	13.6	920,144	7.0	6,089,859	46.1	575,730
1977	15,036,431	100.0	5,229,115	34.8	1,986,460	13.2	959,707	6.4	6,861,149	45.6	653,805
1978	16,948,581	100.0	5,577,201	32.9	2,125,080	12.5	1,213,125	7.2	8,033,173	47.4	994,891
1979	21,213,615	100.0	7,867,090	37.1	2,421,163	11.4	1,351,777	6.4	9,573,153	45.1	123,238
1980	26,014,012	100.0	10,847,647	41.7	2,707,935	10.4	1,529,674	5.9	10,922,199	42.0	-1,666
1981	**	**	**	**	**	**	**	**	**	**	**

*DETAILS MAY NOT ADD TO TOTAL DUE TO ROUNDING.

**NOT AVAILABLE DUE TO NEW REPORTING PROCEDURES BY CIVIL AERONAUTICS BOARD. SEE TABLE 6.15 FOR NEW DATA AND SEE EXPLANATION IN INTRODUCTION OF CHAPTER.

TABLE 6.12
OPERATING REVENUE OF INTERNATIONAL/TERITORIAL PASSENGER/CARGO OPERATORS,
CERTIFIED ROUTE AIR CARRIERS: 1972 - 1981
(THOUSANDS OF DOLLARS)

YEAR	TOTAL OPERATING REVENUES*		PASSENGER		U.S. MAIL (INCLUDING SUBSIDY)		EXPRESS AND FREIGHT		EXCESS BAGGAGE		OTHER	
	AMOUNT	PERCENT	AMOUNT	PERCENT	AMOUNT	PERCENT	AMOUNT	PERCENT	AMOUNT	PERCENT	AMOUNT	PERCENT
1972	2,284,300	100.0	1,706,512	74.7	77,378	3.4	242,354	10.6	14,459	0.6	243,649	10.7
1973	2,526,878	100.0	1,894,914	75.0	71,366	2.8	268,055	10.6	15,231	0.6	277,314	11.0
1974	2,921,607	100.0	2,121,651	72.6	83,595	2.9	335,704	11.5	20,965	0.7	359,693	12.3
1975	3,063,399	100.0	2,230,081	72.9	89,793	2.9	355,805	11.6	25,476	0.8	362,245	11.8
1976	3,316,136	100.0	2,410,987	72.9	77,620	2.3	382,053	11.5	27,259	0.8	418,217	12.6
1977	3,774,262	100.0	2,785,706	73.8	79,582	2.1	425,296	11.3	20,797	0.6	462,882	12.3
1978	4,331,776	100.0	3,304,992	76.3	82,457	1.9	444,087	10.3	20,020	0.5	480,221	11.1
1979	5,191,458	100.0	4,071,327	78.4	96,251	1.8	529,840	10.2	22,743	0.4	471,297	9.1
1980	6,364,238	100.0	4,798,800	75.4	138,821	2.2	590,894	9.3	24,825	0.4	810,899	12.7
1981	**	**	**	**	**	**	**	**	**	**	**	**

*DETAILS MAY NOT ADD TO TOTAL DUE TO ROUNDING.

**NOT AVAILABLE DUE TO NEW REPORTING PROCEDURES BY THE CIVIL AERONAUTICS BOARD. SEE TABLE 6.16 FOR NEW DATA AND SEE EXPLANATION IN INTRODUCTION OF CHAPTER.

TABLE 6.13
OPERATING EXPENSES OF INTERNATIONAL/TERRITORIAL PASSENGER/CARGO OPERATORS,
CERTIFIED ROUTE AIR CARRIERS: 1972 - 1981
(THOUSANDS OF DOLLARS)

YEAR	TOTAL OPERATING EXPENSES*		AIRCRAFT OPERATING EXPENSES				NET OPERATING INCOME OR LOSS AMOUNT				
	AMOUNT	PERCENT	FLIGHT OPERATIONS	Maintenance	DEPRECIATION AND AMORTIZATION FLIGHT EQUIPMENT AND OTHER	GROUND AND INDIRECT EXPENSE					
			AMOUNT	PERCENT	AMOUNT	PERCENT	AMOUNT				
1972	2,233,879	100.0	595,859	26.7	300,476	13.4	211,908	9.5	1,125,635	50.4	50,421
1973	2,458,971	100.0	680,521	27.6	316,597	12.9	213,772	8.8	1,248,081	50.7	67,907
1974	2,994,713	100.0	1,037,441	34.6	356,187	12.0	213,966	7.1	1,387,119	46.3	-73,104
1975	3,059,348	100.0	1,050,250	34.3	363,869	11.9	212,456	7.0	1,432,774	46.8	4,051
1976	3,182,236	100.0	1,089,387	34.2	368,190	11.6	192,879	6.1	1,531,780	48.1	133,900
1977	3,552,189	100.0	1,170,021	32.9	414,486	11.7	238,009	6.7	1,779,672	48.7	222,072
1978	4,007,653	100.0	1,210,641	30.2	457,787	11.4	303,424	7.6	2,035,801	50.8	324,124
1979	5,105,027	100.0	1,795,279	35.2	520,805	10.2	327,028	6.4	2,461,915	48.2	86,384
1980	6,521,824	100.0	2,668,042	41.0	598,375	9.2	375,104	5.8	2,880,303	44.2	-157,585
1981	**	**	**	**	**	**	**	**	**	**	**

*DETAILS MAY NOT ADD TO TOTAL DUE TO ROUNDING.

**NO LONGER AVAILABLE DUE TO NEW REPORTING PROCEDURES BY THE CIVIL AERONAUTICS BOARD, SEE TABLE 6.17 FOR NEW DATA AND SEE EXPLANATION IN INTRODUCTION OF CHAPTER.

TABLE 6-14

OPERATING REVENUE OF DOMESTIC OPERATORS,
CERTIFICATED ROUTE AIR CARRIERS: 1972 - 1981
(THOUSANDS OF DOLLARS)

YEAR	TOTAL OPERATING REVENUES*		PASSENGER		U.S. MAIL (INCLUDING SUBSIDY)		EXPRESS AND FREIGHT		EXCESS BAGGAGE		OTHER	
	AMOUNT	PERCENT	AMOUNT	PERCENT	AMOUNT	PERCENT	AMOUNT	PERCENT	AMOUNT	PERCENT	AMOUNT	PERCENT
1972	8,651,742	100.0	7,564,842	87.4	229,989	2.7	595,583	6.9	12,842	0.1	248,477	2.9
1973	9,694,007	100.0	8,379,396	86.4	262,626	2.7	693,610	7.2	14,289	0.1	344,086	3.6
1974	11,545,790	100.0	9,757,503	84.5	263,614	2.3	759,056	6.6	16,581	0.1	749,056	6.5
1975	12,020,059	100.0	10,123,503	89.2	252,750	2.1	781,638	6.5	18,869	0.2	803,298	7.0
1976	13,838,501	100.0	11,855,266	85.3	294,175	2.1	932,958	6.7	22,014	0.2	794,610	5.7
1977	15,822,428	100.0	13,469,111	85.3	355,117	2.2	1,085,888	6.9	20,913	0.1	871,129	5.5
1978	18,189,473	100.0	15,508,727	85.3	335,525	1.8	1,326,842	7.3	22,900	0.1	995,474	5.5
1979	21,652,405	100.0	18,719,830	86.5	415,737	1.9	1,455,828	6.7	27,681	0.1	1,033,513	4.8
1980	26,403,576	100.0	23,081,487	87.4	529,572	2.0	1,552,836	5.9	32,168	0.1	1,207,184	4.6
1981	29,013,691	100.0	25,491,015	87.9	608,233	2.1	1,617,705	5.6	36,183	0.1	1,258,055	4.3

*DETAILS MAY NOT ADD TO TOTAL DUE TO ROUNDING.

TABLE 6.15

OPERATING EXPENSES OF DOMESTIC OPERATORS,
CERTIFIED ROUTE AIR CARRIERS: 1972 - 1981
(Thousands of Dollars)

YEAR	AIRCRAFT OPERATING EXPENSES				NET OPERATING INCOME OR LOSS AMOUNT	
	FLIGHT OPERATIONS		DEPRECIATION AND AMORTIZATION FLIGHT EQUIPMENT AND OTHER			
	AMOUNT	PERCENT	AMOUNT	PERCENT		
1972	8,158,450	100.0	2,347,584	28.8	1,246,452	
1973	9,200,212	100.0	2,638,061	28.7	1,407,618	
1974	10,760,565	100.0	3,345,010	31.1	1,513,858	
1975	11,902,956	100.0	3,919,059	32.9	1,610,751	
1976	13,323,961	100.0	4,448,117	33.4	1,815,748	
1977	15,165,899	100.0	5,287,884	34.9	2,001,329	
1978	17,171,530	100.0	5,669,021	33.0	2,154,909	
1979	21,522,972	100.0	7,938,440	37.2	2,457,497	
1980	26,409,258	100.0	11,029,423	41.8	2,757,663	
1981	29,276,723	100.0	12,157,311	41.5	2,842,749	
					493,292	
					493,795	
					785,226	
					117,103	
					574,541	
					46.4	
					46.9	
					46.7	
					46.1	
					46.0	
					45.5	
					47.3	
					45.0	
					41.9	
					42.9	
					-263,032	

*DETAILS MAY NOT ADD TO TOTAL DUE TO ROUNDING.

TABLE 6.16
OPERATING REVENUE OF INTERNATIONAL OPERATORS,
CERTIFIED ROUTE AIR CARRIERS: 1972 - 1981/
(THOUSANDS OF DOLLARS)

YEAR	TOTAL OPERATING REVENUES*		PASSENGER		U.S. MAIL (INCLUDING SUBSIDY)		EXPRESS AND FREIGHT		EXCESS BAGGAGE		OTHER PERCENT
	AMOUNT	PERCENT	AMOUNT	PERCENT	AMOUNT	PERCENT	AMOUNT	PERCENT	AMOUNT	PERCENT	
1972	2,511,529	100.0	1,706,512	67.9	102,502	4.1	342,589	13.6	14,459	0.6	345,467 13.8
1973	2,724,771	100.0	1,894,914	69.5	101,350	3.7	381,024	14.0	15,231	0.6	332,250 12.2
1974	3,157,431	100.0	2,121,651	67.2	109,396	3.4	488,698	15.5	20,965	0.7	416,722 13.2
1975	3,336,267	100.0	2,230,081	66.9	114,449	3.4	528,168	15.8	25,476	0.8	438,092 13.1
1976	3,604,687	100.0	2,410,987	66.9	103,981	2.9	564,257	15.7	27,259	0.7	498,204 13.8
1977	4,103,943	100.0	2,785,706	67.9	103,450	2.5	632,657	15.4	20,797	0.5	561,355 13.7
1978	4,702,663	100.0	3,305,236	70.3	107,903	2.3	660,040	14.0	20,020	0.4	610,168 13.0
1979	5,574,590	100.0	4,071,862	75.0	119,948	2.2	755,492	13.6	22,743	0.4	604,546 10.8
1980	6,543,033	100.0	4,777,026	73.0	163,204	2.5	875,682	13.4	24,749	0.4	702,372 10.7
1981	6,390,140	100.0	4,749,683	74.3	151,422	2.4	857,002	13.4	34,282	0.5	607,378 9.4

*DETAILS MAY NOT ADD TO TOTAL DUE TO ROUNDING.

✓ INCLUDES ALL-CARGO, TRUNKS AND OTHER.

TABLE 6.17

OPERATING EXPENSES OF INTERNATIONAL OPERATORS,
 CERTIFIED ROUTE AIR CARRIERS: 1972 - 1981
 (THOUSANDS OF DOLLARS)

YEAR	AIRCRAFT OPERATING EXPENSES				GROUNDS AND INDIRECT EXPENSE				NET OPERATING INCOME OR LOSS AMOUNT
	FLIGHT OPERATIONS		Maintenance	Flight Equipment	DEPRECIATION AND AMORTIZATION FLIGHT EQUIPMENT AND OTHER	Amount	Percent	Amount	
Total Operating Expenses*	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	
1972	2,420,351	100.0	674,358	27.9	324,630	13.4	225,131	9.3	1,196,231
1973	2,635,299	100.0	751,582	28.5	338,089	12.8	225,223	8.6	1,318,405
1974	3,217,769	100.0	1,135,887	35.3	381,349	11.9	229,977	7.1	1,470,557
1975	3,325,667	100.0	1,175,245	35.3	392,354	11.8	225,436	6.8	1,532,652
1976	3,457,412	100.0	1,215,273	35.2	398,914	11.5	205,169	5.9	1,638,057
1977	3,852,413	100.0	1,303,202	33.8	449,868	11.7	253,164	6.6	1,846,180
1978	4,355,044	100.0	1,351,126	31.0	498,483	11.5	323,352	7.4	2,182,082
1979	5,505,332	100.0	1,960,372	35.6	571,215	10.4	351,700	6.4	2,562,043
1980	6,765,623	100.0	2,775,331	41.0	615,982	9.1	385,396	5.7	2,988,914
1981	6,595,039	100.0	2,753,907	41.8	561,836	8.5	385,986	5.8	2,893,309
									-204,898

*DETAILS MAY NOT ADD TO TOTAL DUE TO ROUNDING.

VII. AIRMEN

Statistics pertaining to airmen, both pilot and nonpilot, were obtained from the official airmen certification records maintained by the Airmen Certification and Medical Certification Branches of the Mike Monroney Aeronautical Center at Oklahoma City, Oklahoma. Active pilots are those pilots who hold a pilot certificate and a valid medical certificate--one that was issued within the last 25 months.

TABLE 7-1
ESTIMATED ACTIVE PILOT CERTIFICATES HELD: DECEMBER 31, 1972-1981

CATEGORY	1972	1973 3/	1974	1975	1976	1977	1978	1979	1980	1981
Pilot--TOTAL	750,869	714,607	733,728	728,187	744,246	B/783,932	798,833	814,667	827,071	764,182
STUDENT	181,477	181,905	180,795	176,978	188,801	B/203,510	204,874	210,180	199,833	179,912
PRIVATE	321,413	298,921	305,848	305,863	309,005	327,424	337,644	343,276	357,479	328,562
COMMERCIAL	196,228	182,444	192,425	189,342	187,801	188,763	185,833	182,097	183,442	168,580
AIRLINE TRANSPORT . . .	37,714	38,139	41,002	42,592	45,072	50,149	55,881	63,652	69,569	70,311
HELICOPTER (ONLY) . . .	7,987	5,968	5,647	4,932	4,804	4,819	4,874	5,218	6,030	6,453
GLIDER (ONLY) 1/* . . .	4,080	4,288	4,824	5,348	5,789	6,208	6,541	6,796	7,039	7,388
LIGHTER-THAN-AIR 1/* . .	1,970	2,942	3,187	3,132	2,974	3,059	3,186	3,448	3,679	2,976
NONPILOT--TOTAL	B/315,348	304,747	314,394	323,934	334,681	348,584	362,350	377,213	393,486	398,368
MECHANIC 1/	201,700	193,337	198,863	205,436	212,303	220,768	228,743	237,611	250,157	262,705
PARACHUTE RIGGER 1/ . .	7,287	6,941	7,900	8,327	8,718	8,994	9,200	9,381	9,547	9,716
GROUND INSTRUCTOR 1/ . .	48,450	46,827	49,249	51,365	53,464	55,717	57,738	59,680	61,550	63,246
DISPATCHER 1/	5,637	5,527	5,576	5,741	5,838	5,972	6,161	6,446	6,799	7,094
CONTROL TOWER OPERATOR B/23,353	23,250	23,342	23,956	24,584	25,107	25,388	25,232	25,130	15,5284	
FLIGHT NAVIGATOR	2,957	2,636	2,509	2,321	2,214	2,155	2,092	1,994	1,936	1,785
FLIGHT ENGINEER	25,964	26,229	26,955	26,788	27,560	29,871	33,028	36,869	38,367	38,294
FLIGHT INSTRUCTOR CERTIFICATES	37,858	36,795	42,418	44,777	46,236	49,362	52,201	54,398	60,440	57,523
INSTRUMENT RATINGS 2/	187,909	185,969	199,323	203,954	211,364	226,334	236,312	247,096	260,461	252,535

ESTIMATED: 1980 IS BASED ON A 27-MONTH CRITERIA ONLY. OTHER YEARS ARE BASED ON A 25-MONTH CRITERIA.

* GLIDER AND LIGHTER-THAN-AIR PILOTS ARE NOT REQUIRED TO HAVE A MEDICAL EXAMINATION; HOWEVER, THE TOTALS ABOVE REPRESENT PILOTS WHO RECEIVED A MEDICAL EXAMINATION.

1/ NUMBERS REPRESENT ALL CERTIFICATES ON RECORD. NO MEDICAL EXAMINATION REQUIRED.

2/ SPECIAL RATINGS SHOWN ON PILOT CERTIFICATES, I.E., DO NOT INDICATE ADDITIONAL CERTIFICATES.

3/ THE DECREASE IN THE NUMBER OF AIRMEN RESULTED FROM A PURGING OF THE AIRMEN CERTIFICATION FILES. DURING THIS PROCESS, APPROXIMATELY 26,000 DUPLICATES OR FAULTY RECORDS WERE ELIMINATED.

4/ DOES NOT INCLUDE APPROXIMATELY 15,000 AIR TRAFFIC CONTROLLERS. THEIR MEDICAL CERTIFICATES ARE NO LONGER PROCESSED BY THE CIVIL AEROMEDICAL INSTITUTE (CAMI). THEY ARE BEING PROCESSED BY A SEPARATE SYSTEM, AND WILL BE INCLUDED IN FUTURE COUNTS.

B/ REVISED

TABLE 7.2
ESTIMATED WOMEN ACTIVELY ENGAGED IN AVIATION: DECEMBER 31, 1972-1981

CATEGORY OF CERTIFICATES HELD	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981
Pilot--TOTAL	33,001	34,556	36,943	37,934	41,643	47,294	49,874	51,733	52,902	47,721
STUDENT	17,053	18,593	19,298	19,600	22,254	25,705	26,354	26,714	26,006	22,591
PRIVATE	13,391	13,232	14,465	14,952	15,838	17,702	19,267	20,275	21,554	19,602
COMMERCIAL	2,196	2,083	2,596	2,733	2,857	3,090	3,306	3,618	3,993	4,101
AIRLINE TRANSPORT	101	95	116	137	160	193	270	361	480	584
HELICOPTER (ONLY)	10	7	5	11	17	18	17	27	55	87
GLIDER (ONLY) 1/	201	216	271	301	352	391	433	461	496	540
LIGHTER-THAN-AIR 1/	49	130	192	200	165	195	227	277	318	216
NONPILOT--TOTAL	3,594	3,074	3,471	3,809	4,252	4,716	5,135	5,600	6,111	6,348
MECHANIC 1/	349	284	315	360	422	505	600	695	890	1,051
PARACHUTE RIGGER 1/	483	336	495	504	516	535	544	553	562	580
GROUND INSTRUCTOR 1/	2,166	1,960	2,139	2,249	2,369	2,525	2,682	2,852	3,015	3,213
DISPATCHER 1/	40	39	42	50	55	65	76	105	141	167
CONTROL TOWER OPERATOR	556	453	473	638	874	1,044	1,151	1,250	1,332	1,447
FLIGHT ENGINEER	0	2	7	8	16	42	82	145	171	189
FLIGHT NAVIGATOR	0	0	0	0	0	0	0	0	0	1
FLIGHT INSTRUCTOR	664	618	834	945	1,054	1,238	1,458	1,699	2,079	2,165

ESTIMATED: 1980 IS BASED ON A 27-MONTH CRITERIA ONLY. OTHER YEARS ARE BASED ON A 25-MONTH CRITERIA.

NOTE: INSTRUMENT RATINGS NOT REPORTED.

* GLIDER AND LIGHTER-THAN-AIR PILOTS ARE NOT REQUIRED TO HAVE A MEDICAL EXAMINATION; HOWEVER, THE TOTALS ABOVE REPRESENT PILOTS WHO RECEIVED A MEDICAL EXAMINATION.

1/ NO MEDICAL EXAMINATION REQUIRED.

TABLE 7
PILOT CERTIFICATES ISSUED, BY CATEGORY: CALENDAR YEARS 1977-1981

CATEGORY OF CERTIFICATES	1977		1978		1979		1980		1981	
	ORIGINAL ISSUANCES	ADDITIONAL RATINGS								
Pilot--TOTAL	212,331	44,708	216,107	R/ 39,959	214,567	41,331	175,235	38,791	184,292	33,532
STUDENT 1/	138,816	0	157,032	R/ 0	135,956	0	102,301	0	117,962	0
PRIVATE	54,657	15,104	58,064	16,048	54,466	16,466	50,458	16,035	45,715	14,897
COMMERCIAL	11,121	22,806	11,789	17,501	12,627	17,793	12,452	16,015	10,657	12,146
AIRLINE TRANSPORT . . .	5,697	6,229	6,912	5,921	8,481	6,603	7,116	6,289	4,763	5,991
HELICOPTER (ONLY) . . .	444	328	1,122	287	1,300	283	1,721	272	1,985	302
GLIDER (ONLY)	792	220	759	188	642	157	583	151	629	164
LIGHTER-THAN-AIR	304	21	429	14	595	29	604	29	2,583	32
NONPILOT--TOTAL	16,066	7,267	16,418	6,679	17,895	7,129	17,280	7,275	18,498	7,263
MECHANIC	9,121	3,507	8,791	3,269	9,697	3,812	11,640	4,254	15,675	4,790
PARACHUTE RIGGER	304	36	235	50	201	45	185	50	252	17
GROUND INSTRUCTOR	2,404	729	2,193	5/4	2,081	515	1,981	570	1,861	384
DISPATCHER	161	0	193	0	292	0	351	0	502	1
CONTROL TOWER OPERATOR .	1,645	3,008	1,391	2,540	1,109	2,483	1,179	2,286	1,186	1,897
FLIGHT NAVIGATOR	16	0	8	1	2	0	9	0	8	0
FLIGHT ENGINEER	2,415	187	3,607	245	4,513	276	1,935	115	1,256	174
FLIGHT INSTRUCTOR CERTIFICATES 1/	6,352	6,597	5,930	5,375	6,716	6,072	7,188	6,953	6,461	8,767
INSTRUMENT RATINGS* . . .	0	18,764	0	16,265	0	16,651	0	16,123	0	14,219

1/ DATA REPRESENTS THE NUMBER PROCESSED EACH YEAR.
R/ REVISED.

NOTE: ADDITIONAL RATINGS ARE ENTERED ON CURRENT AIRMAN CERTIFICATES AS FOLLOWS:
 PRIVATE, COMMERCIAL, AND AIRLINE TRANSPORT PILOT--AIRCRAFT CATEGORY, CLASS, AND TYPE INSTRUMENT RATING.
 HELICOPTER PILOT--INSTRUMENT AND TYPE RATINGS.
 FLIGHT INSTRUCTOR--RATINGS FOR EACH AIRCRAFT CATEGORY IN WHICH THE HOLDER IS QUALIFIED, AND FOR INSTRUMENT FLYING INSTRUCTION.
 MECHANIC--AIRFRAME AND POWERPLANT RATINGS.
 PARACHUTE RIGGER--SENIOR OR MASTER RIGGER RATINGS.
 GROUND INSTRUCTOR--RATINGS FOR EACH SUBJECT IN WHICH THE HOLDER IS QUALIFIED TO GIVE INSTRUCTION.
 AIR TRAFFIC CONTROL TOWER OPERATOR--JUNIOR/SENIOR RATINGS FOR AIRPORT WHERE HOLDER MAY CONTROL AIR TRAFFIC.

* SPECIAL RATINGS SHOWN ON PILOT CERTIFICATES REPRESENTED ABOVE; NOT TO BE ADDED TO TOTAL.

2/ NOT INCLUDED IN TOTAL.

TABLE 7.4

INSTRUMENT RATINGS ISSUED: 1981, 1980, 1977

CLASS OF CERTIFICATES	1981	1980	1977	PERCENT CHANGE 1980-1981
TOTAL--ALL GROUPS	14,219	16,123	18,764	-12
PRIVATE PILOTS--TOTAL	9,568	10,418	8,986	-8
PRIVATE AIRPLANE (ONLY)	8,889	9,714	8,415	-8
PRIVATE AIRPLANE, PRIVATE GLIDER	115	112	127	+3
PRIVATE AIRPLANE, COMMERCIAL GLIDER	8	6	4	+33
PRIVATE AIRPLANE, PRIVATE HELICOPTER	16	15	26	+7
PRIVATE AIRPLANE, COMMERCIAL HELICOPTER	216	208	180	+4
PRIVATE AIRPLANE, PRIVATE GLIDER, PRIVATE HELICOPTER	0	1	0	---
PRIVATE AIRPLANE, OTHER	324	362	234	-10
COMMERCIAL PILOTS--TOTAL	3,471	4,753	9,232	-27
COMMERCIAL AIRPLANE (ONLY)	2,768	3,821	8,036	-28
COMMERCIAL AIRPLANE, PRIVATE GLIDER	31	45	97	-31
COMMERCIAL AIRPLANE, COMMERCIAL GLIDER	50	56	88	-11
COMMERCIAL AIRPLANE, PRIVATE HELICOPTER	2	2	12	---
COMMERCIAL AIRPLANE, COMMERCIAL HELICOPTER	604	810	975	-25
COMMERCIAL AIRPLANE, PRIVATE GLIDER, COMMERCIAL HELICOPTER	4	8	3	-50
COMMERCIAL AIRPLANE, COMMERCIAL GLIDER, COMMERCIAL HELICOPTER	11	10	17	+10
COMMERCIAL AIRPLANE, OTHER	1	1	4	---
ROTORCRAFT PILOTS--TOTAL	1,180	952	546	+24
COMMERCIAL HELICOPTER	1,160	927	540	+25
COMMERCIAL HELICOPTER, AIRLINE TRANSPORT HELICOPTER	20	22	5	-9
COMMERCIAL HELICOPTER, PRIVATE GLIDER	0	1	1	---
COMMERCIAL HELICOPTER, COMMERCIAL GLIDER	0	2	0	---

TABLE 7.5

ESTIMATED INSTRUMENT RATINGS HELD, BY CLASS OF CERTIFICATES: DECEMBER 31, 1981 AND 1980

CLASS OF CERTIFICATES	1981	1980	PERCENT CHANGE 1981-1980
TOTAL--ALL GROUPS	252,535	260,461	- 3
PRIVATE PILOTS--TOTAL	<u>39,862</u>	<u>39,347</u>	+ 1
PRIVATE AIRPLANE, PRIVATE GLIDER	853	849	-
PRIVATE AIRPLANE, COMMERCIAL GLIDER	75	68	+10
PRIVATE AIRPLANE, PRIVATE HELICOPTER	229	242	- 5
PRIVATE AIRPLANE, PRIVATE GLIDER, PRIVATE HELICOPTER	15	17	-12
PRIVATE AIRPLANE, COMMERCIAL HELICOPTER	1,576	1,617	- 3
PRIVATE AIRPLANE, PRIVATE GYROPLANE	3	2	+50
PRIVATE AIRPLANE, PRIVATE GLIDER, COMMERCIAL HELICOPTER	12	14	+14
PRIVATE AIRPLANE, COMMERCIAL GLIDER, COMMERCIAL HELICOPTER	7	8	-13
PRIVATE AIRPLANE, OTHER	1	1	--
COMMERCIAL PILOTS--TOTAL	<u>138,023</u>	<u>147,741</u>	- 7
COMMERCIAL AIRPLANE (ONLY)	117,334	125,854	- 7
COMMERCIAL AIRPLANE, PRIVATE GLIDER	1,817	1,883	- 4
COMMERCIAL AIRPLANE, COMMERCIAL GLIDER	3,259	3,377	- 3
COMMERCIAL AIRPLANE, PRIVATE HELICOPTER	160	140	+14
COMMERCIAL AIRPLANE, COMMERCIAL HELICOPTER	14,729	15,734	- 6
COMMERCIAL AIRPLANE, PRIVATE GLIDER, COMMERCIAL HELICOPTER	136	138	- 1
COMMERCIAL AIRPLANE, COMMERCIAL GLIDER, COMMERCIAL HELICOPTER	525	549	- 4
COMMERCIAL AIRPLANE, COMMERCIAL GYROPLANE	20	18	+11
COMMERCIAL AIRPLANE, COMMERCIAL HELICOPTER, COMMERCIAL GYROPLANE	18	22	-19
COMMERCIAL AIRPLANE, COMMERCIAL GYROPLANE, COMMERCIAL GLIDER	2	1	+100
COMMERCIAL AIRPLANE, COMMERCIAL GLIDER, PRIVATE HELICOPTER	11	11	--
COMMERCIAL AIRPLANE, COMMERCIAL GYROPLANE, COMMERCIAL HELICOPTER, COMMERCIAL GLIDER	12	14	-14
AIRLINE TRANSPORT PILOTS--TOTAL	<u>70,311</u>	<u>69,569</u>	+ 1
AIRLINE TRANSPORT AIRLINE	69,377	68,760	+ 1
AIRLINE TRANSPORT AIRPLANE, AIRLINE TRANSPORT HELICOPTER	934	809	+15
ROTORCRAFT PILOTS--TOTAL	<u>4,339</u>	<u>3,804</u>	+14
COMMERCIAL HELICOPTER	4,286	3,759	+14
AIRLINE TRANSPORT HELICOPTER	36	28	+29
ROTORCRAFT OTHER	17	17	--

ESTIMATED: 1981 IS BASED ON A 25-MONTH CRITERIA. 1980 IS BASED ON A 27-MONTH CRITERIA.

TABLE 7-6
ESTIMATED ACTIVE HELICOPTER PILOTS BY CLASS OF CERTIFICATES:
DECEMBER 31, 1981

CLASS OF CERTIFICATES	NUMBER OF CERTIFICATES HELD
TOTAL	29,236
PRIVATE HELICOPTER	410
PRIVATE GYROPLANE, PRIVATE AIRPLANE	35
PRIVATE HELICOPTER, PRIVATE AIRPLANE	961
PRIVATE HELICOPTER, PRIVATE AIRPLANE, PRIVATE GLIDER	41
PRIVATE AIRPLANE, COMMERCIAL GYROPLANE, COMMERCIAL HELICOPTER	1
PRIVATE AIRPLANE, PRIVATE GLIDER, COMMERCIAL HELICOPTER	18
PRIVATE GYROPLANE	8
PRIVATE AIRPLANE, COMMERCIAL GLIDER, COMMERCIAL HELICOPTER	10
COMMERCIAL HELICOPTER	5,761
COMMERCIAL HELICOPTER, PRIVATE AIRPLANE	2,814
COMMERCIAL AIRPLANE, COMMERCIAL HELICOPTER	16,944
COMMERCIAL AIRPLANE, PRIVATE HELICOPTER	208
COMMERCIAL AIRPLANE, PRIVATE GLIDER, COMMERCIAL HELICOPTER	150
COMMERCIAL AIRPLANE, COMMERCIAL GLIDER, COMMERCIAL HELICOPTER	592
COMMERCIAL HELICOPTER, PRIVATE GLIDER	10
COMMERCIAL HELICOPTER, COMMERCIAL GLIDER	7
COMMERCIAL GYROPLANE, COMMERCIAL AIRPLANE	27
COMMERCIAL AIRPLANE, COMMERCIAL GYROPLANE, COMMERCIAL GLIDER	3
COMMERCIAL AIRPLANE, COMMERCIAL GYROPLANE, COMMERCIAL HELICOPTER	20
COMMERCIAL AIRPLANE, COMMERCIAL GYROPLANE, COMMERCIAL HELICOPTER, COMMERCIAL GLIDER	13
COMMERCIAL HELICOPTER, COMMERCIAL GYROPLANE	3
COMMERCIAL AIRPLANE, COMMERCIAL GLIDER, PRIVATE HELICOPTER	12
AIRLINE TRANSPORT HELICOPTER	254
AIRLINE TRANSPORT AIRPLANE, AIRLINE TRANSPORT HELICOPTER	934

ESTIMATED: DATA IS BASED ON A 25-MONTH CRITERIA.

TABLE 7.7
ESTIMATED ACTIVE GLIDER PILOTS BY CLASS OF CERTIFICATES:
DECEMBER 31, 1981

CLASS OF CERTIFICATES	NUMBER OF CERTIFICATES HELD
TOTAL	19,331
PRIVATE GLIDER	6,156
PRIVATE AIRPLANE, PRIVATE GLIDER	4,107
PRIVATE AIRPLANE, COMMERCIAL GLIDER	650
PRIVATE AIRPLANE, PRIVATE GLIDER, PRIVATE HELICOPTER	41
PRIVATE AIRPLANE, PRIVATE GLIDER, COMMERCIAL HELICOPTER	18
PRIVATE AIRPLANE, COMMERCIAL GLIDER, COMMERCIAL HELICOPTER	10
PRIVATE GLIDER, COMMERCIAL AIRPLANE	2,193
PRIVATE GLIDER, COMMERCIAL AIRPLANE, COMMERCIAL HELICOPTER	150
PRIVATE GLIDER, COMMERCIAL HELICOPTER	10
COMMERCIAL GLIDER	1,232
COMMERCIAL AIRPLANE, COMMERCIAL GLIDER	4,137
COMMERCIAL AIRPLANE, COMMERCIAL GLIDER, PRIVATE HELICOPTER	12
COMMERCIAL AIRPLANE, COMMERCIAL GLIDER, COMMERCIAL HELICOPTER	592
COMMERCIAL HELICOPTER, COMMERCIAL GLIDER	7
COMMERCIAL AIRPLANE, COMMERCIAL GYROPLANE, COMMERCIAL GLIDER, COMMERCIAL HELICOPTER	13
COMMERCIAL AIRPLANE, COMMERCIAL GYROPLANE, COMMERCIAL GLIDER	3

ESTIMATED: DATA IS BASED ON A 25-MONTH CRITERIA.

TABLE 7.8

ESTIMATED ACTIVE HELICOPTER AND GLIDER PILOTS:

DECEMBER 31, 1977-81

CALENDAR YEAR	TOTAL HELICOPTER PILOTS 1/		TOTAL GLIDER PILOTS 2/	
	NUMBER	PERCENT CHANGE	NUMBER	PERCENT CHANGE
1981	29,236	- 3	19,331	- 2
1980	30,085	+ 4	19,626	+ 3
1979	28,857	- 1	18,973	+ 2
1978	28,890	+ 1	18,610	+ 4
1977	28,566	+ 3	17,933	+ 6

ESTIMATED: DATA IS BASED ON A 27-MONTH CRITERIA FOR 1980. OTHER YEARS ARE BASED ON A 25-MONTH CRITERIA.

1/ INCLUDES PILOTS WITH RATINGS TO FLY HELICOPTERS ONLY.

2/ INCLUDES PILOTS WITH RATINGS TO FLY GLIDERS ONLY.

TABLE 7.9

ESTIMATED TOTAL AND INSTRUMENT RATED PILOTS:

DECEMBER 31, 1977-81

CALENDAR YEAR	TOTAL PILOTS 1/	INSTRUMENT RATED PILOTS	
		NUMBER	PERCENT OF TOTAL
1981	584,270	252,535	43
1980	627,238	260,461	42
1979	604,487	247,096	41
1978	593,959	236,312	40
1977	580,422	226,334	39

ESTIMATED: 1980 IS BASED ON A 27-MONTH CRITERIA ONLY. OTHER YEARS ARE BASED ON A 25-MONTH CRITERIA.

1/ EXCLUDES STUDENT PILOTS.

TABLE 7.10
ESTIMATED ACTIVE PILOT CERTIFICATES HELD, BY CATEGORY AND AGE GROUP OF HOLDER: 1981, 1980, 1977

Age Group	Total Active Pilots	Type of Pilot Certificates						Commercial						Airline Transport					
		Student		Private		Commercial		Airline Transport		Student		Private		Commercial		Airline Transport			
1981	1980	1977	1981	1980	1977	1981	1980	1977	1981	1980	1977	1981	1980	1977	1981	1980	1977		
Total . . .	764,182	827,071	783,933	179,912	199,333	203,510	308,562	357,479	327,424	168,580	183,442	188,763	70,314	68,569	50,149				
14-15 . . .	323	260	381	322	260	381	0	0	0	0	0	0	0	0	0	0	0	0	
16-19 . . .	28,036	31,071	31,993	21,453	23,335	24,075	6,055	7,069	7,289	330	468	337	0	0	0	0	0	0	
20-24 . . .	85,470	94,956	93,318	39,160	44,946	46,224	32,314	35,825	35,712	11,949	12,334	9,773	6,16	686	356				
25-29 . . .	108,992	120,234	117,352	35,753	40,503	41,095	44,423	50,423	45,439	19,677	20,627	24,604	6,058	5,975	3,412				
30-34 . . .	118,224	134,396	127,721	26,568	32,461	31,983	48,921	54,510	47,508	23,759	29,774	37,175	13,011	13,656	8,079				
35-39 . . .	110,645	115,600	106,092	20,314	21,448	21,277	45,777	48,309	42,565	29,050	31,695	32,478	12,685	11,865	8,179				
40-44 . . .	86,624	91,898	88,244	12,712	13,718	14,453	37,810	40,393	37,383	23,522	25,353	26,722	11,010	10,870	8,484				
45-49 . . .	72,484	78,758	79,126	8,831	9,749	11,426	32,995	37,177	40,253	19,748	21,164	19,159	9,888	9,408	7,055				
50-54 . . .	62,533	66,185	64,834	6,675	7,210	7,032	34,502	37,976	35,534	13,743	13,669	15,508	6,552	6,100	5,719				
55-59 . . .	48,171	52,785	46,738	5,643	3,734	3,476	25,184	25,662	20,701	13,037	15,783	15,165	5,572	6,576	6,473				
60 AND OVER	42,688	40,928	28,164	2,481	2,469	2,088	20,581	20,155	15,040	13,755	12,575	7,892	4,999	4,433	2,392				
Type of Pilot Certificates																			
Helicopter (Only)																			
1981	1980	1977	1981	1980	1977	1981	1980	1977	1981	1980	1977	1981	1980	1977	1981	1980	1977		
Total . . .	6,453	6,020	4,819	7,388	7,039	6,208	2,976	3,679	3,060	57,523	60,440	49,362							
14-15 . . .	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
16-19 . . .	7	11	10	159	168	264	32	20	18	113	170	102							
20-24 . . .	635	435	213	588	631	966	208	99	74	6,119	6,227	4,256							
25-29 . . .	1,565	1,358	1,609	1,113	1,098	999	404	270	164	9,305	9,614	7,768							
30-34 . . .	2,063	2,321	1,865	1,294	1,263	882	608	411	229	10,010	11,246	10,076							
35-39 . . .	1,277	1,081	608	1,009	850	633	533	352	352	9,496	9,581	7,877							
40-44 . . .	517	483	284	684	640	492	369	441	426	6,682	7,163	6,230							
45-49 . . .	224	206	148	545	543	572	333	511	513	5,484	5,785	4,512							
50-54 . . .	101	105	53	645	534	315	491	454	3,856	3,872	3,595								
55-59 . . .	47	35	21	549	517	465	139	478	437	3,075	3,602	3,105							
60 AND OVER	17	15	8	802	695	401	35	606	393	3,383	3,180	2,090							
Flight Instructor /																			

ESTIMATED: 1980 IS BASED ON A 27-MONTH CRITERIA ONLY. OTHER YEARS ARE BASED ON A 25-MONTH CRITERIA.

/ NOT INCLUDED IN TOTAL ACTIVE PILOTS.

TABLE 1.11

ESTIMATED ACTIVE NONPILOTS PILOT CERTIFICATES HELD BY CATEGORY AND AGE GROUP OF HOLDER: 1981-1980-1977

TYPE OF PUBLICATIONS

ESTIMATED: 1980 IS BASED ON A 27-MONTH CRITERIA. OTHER YEARS WERE BASED ON A 25-MONTH CRITERIA.

1/ NUMBER REPRESENT ALL CERTIFICATES ON RECORD. NO MEDICAL EXAMINATION REQUIRED.

TABLE 7.12

ESTIMATED ACTIVE PILOTS AND FLIGHT INSTRUCTORS BY FAA REGION AND STATE:

DECEMBER 31, 1981

FAA REGION AND STATE	TOTAL PILOTS	STUDENT	PRIVATE	COMMERCIAL	AIRLINE TRANSPORT	MISCELLANEOUS 2/	FLIGHT INSTRUCTOR 3/
TOTAL	764,182 1/	179,912	328,562	168,580	70,311	16,817	57,523
UNITED STATES--TOTAL	747,357	175,860	325,328	164,121	67,274	14,774	56,714
NEW ENGLAND--TOTAL	32,576	8,235	13,140	6,631	3,860	710	2,421
MAINE	3,623	919	1,602	843	217	42	235
NEW HAMPSHIRE	4,064	850	1,416	932	792	74	296
RHODE ISLAND	1,608	420	708	331	119	30	116
MASSACHUSETTS	12,333	3,484	5,329	2,258	941	321	896
CONNECTICUT	9,337	2,144	3,378	1,931	1,688	196	747
VERMONT	1,611	418	707	336	103	47	131
EASTERN--TOTAL	94,958	23,670	39,456	21,139	8,272	2,421	7,695
NEW YORK	28,007	7,473	11,850	5,815	1,934	935	2,255
PENNSYLVANIA	21,296	5,499	9,252	4,250	1,820	475	1,839
VIRGINIA	14,903	3,174	5,345	4,543	1,514	327	1,147
MARYLAND	9,433	2,165	4,249	2,122	696	201	705
WEST VIRGINIA	2,931	846	1,275	565	195	50	224
DELAWARE	1,684	331	744	389	187	33	163
NEW JERSEY	15,952	3,977	6,423	3,288	1,896	368	1,316
DISTRICT OF COLUMBIA .	752	205	318	167	30	32	46
GREAT LAKES--TOTAL . . .	133,229	31,748	65,314	25,600	8,733	1,834	10,072
ILLINOIS	31,968	7,807	14,788	6,129	2,834	410	2,520
INDIANA	13,639	3,297	6,841	2,640	670	191	1,075
MINNESOTA	17,841	3,890	8,794	3,504	1,488	165	1,179
MICHIGAN	22,364	5,200	11,461	4,062	1,228	413	1,655
NORTH DAKOTA	3,879	969	1,846	945	92	27	268
OHIO	26,300	6,328	12,757	5,169	1,561	485	2,191
SOUTH DAKOTA	3,438	838	1,725	755	94	26	232
WISCONSIN	13,800	3,419	7,102	2,396	766	117	952
CENTRAL--TOTAL	46,125	9,892	23,656	9,250	2,754	572	3,171
KANSAS	7,294	2,669	6,873	2,746	825	181	894
IOWA	10,997	2,475	6,156	1,904	338	129	658
MISSOURI	14,360	3,128	6,651	3,041	1,320	220	1,164
NEBRASKA	7,474	1,621	3,976	1,559	271	47	455

TABLE 7.12 (CONTINUED)

ESTIMATED ACTIVE PILOTS AND FLIGHT INSTRUCTORS BY FAA REGION AND STATE:

DECEMBER 31, 1981

FAA REGION AND STATE	TOTAL PILOTS	STUDENT	PRIVATE	COMMERCIAL	AIRLINE TRANSPORT	MISCELLANEOUS 2/	FLIGHT INSTRUCTOR 3/
SOUTHERN--TOTAL	<u>116,179</u>	<u>27,291</u>	<u>45,481</u>	<u>28,409</u>	<u>12,591</u>	<u>2,407</u>	<u>8,888</u>
NORTH CAROLINA	13,178	3,379	5,606	2,946	993	254	925
SOUTH CAROLINA	6,390	1,543	2,593	1,683	476	95	488
GEORGIA	16,790	3,676	5,824	4,034	2,910	346	1,237
FLORIDA	46,828	10,456	17,978	11,862	5,837	695	3,623
MISSISSIPPI	5,795	1,496	2,229	1,685	309	76	396
ALABAMA	9,758	2,254	3,859	2,689	488	468	911
TENNESSEE	11,613	2,913	4,783	2,362	1,280	275	885
KENTUCKY	5,827	1,574	2,609	1,148	298	198	423
SOUTHWEST--TOTAL	<u>99,338</u>	<u>23,600</u>	<u>39,469</u>	<u>24,128</u>	<u>10,268</u>	<u>1,873</u>	<u>8,036</u>
LOUISIANA	11,156	2,811	4,072	3,120	818	335	878
OKLAHOMA	14,901	3,573	6,967	3,29	908	163	1,135
TEXAS	60,184	14,015	22,884	14,420	7,753	1,112	5,028
NEW MEXICO	6,394	1,556	2,740	1,523	380	195	496
ARKANSAS	6,703	1,645	2,806	1,775	409	68	499
WESTERN-PACIFIC--TOTAL	<u>137,386</u>	<u>30,626</u>	<u>60,144</u>	<u>30,112</u>	<u>13,343</u>	<u>3,161</u>	<u>9,913</u>
HAWAII	3,532	769	960	1,029	605	169	276
CALIFORNIA	111,849	24,893	49,918	24,006	10,575	2,457	7,998
ARIZONA	15,857	3,606	6,885	3,726	1,214	426	1,145
NEVADA	6,148	1,358	2,381	1,351	949	109	494
NORTHWEST MOUNTAIN--TOTAL	<u>77,146</u>	<u>18,543</u>	<u>34,061</u>	<u>16,274</u>	<u>6,592</u>	<u>1,676</u>	<u>5,789</u>
WASHINGTON	23,737	5,162	9,969	5,592	2,564	450	1,868
OREGON	13,517	3,108	7,148	2,649	555	187	965
IDAHO	5,536	1,248	2,715	1,213	287	73	419
COLORADO	19,864	5,429	7,305	3,934	2,424	772	1,542
WYOMING	3,182	911	1,481	595	166	29	225
UTAH	5,967	1,548	2,716	1,209	378	116	405
MONTANA	5,213	1,137	2,727	1,082	218	49	365
ALASKAN REGION--TOTAL .	<u>10,420</u>	<u>2,254</u>	<u>4,607</u>	<u>2,578</u>	<u>861</u>	<u>120</u>	<u>729</u>
OUTSIDE U.S.--TOTAL . .	<u>16,825</u>	<u>4,052</u>	<u>3,234</u>	<u>4,459</u>	<u>3,037</u>	<u>2,043</u>	<u>809</u>

ESTIMATED: DATA IS BASED ON A 25-MONTH CRITERIA.

NOTE: PUERTO RICO AND VIRGIN ISLANDS ARE INCLUDED IN OUTSIDE U.S. TOTAL.

1/ INCLUDES OUTSIDE U.S.

2/ INCLUDES HELICOPTER, GLIDER, AND LIGHTER-THAN-AIR.

3/ NOT INCLUDED IN TOTAL.

TABLE 7.13
ESTIMATED ACTIVE NONPILOT AIRMEN CERTIFICATES HELD, BY FAA REGION AND STATE:

DECEMBER 31, 1981 1/

FAA REGION AND STATE	TOTAL NONPILOT AIRMEN	MECHANIC	PARACHUTE RIGGER	GROUND INSTRUCTOR	DISPATCHER	CONTROL TOWER OPERATOR 2/	FLIGHT NAVIGATOR	FLIGHT ENGINEER
SOUTHERN--TOTAL . . .	<u>63,264</u>	<u>39,314</u>	<u>1,769</u>	<u>9,800</u>	<u>1,190</u>	<u>3,553</u>	<u>288</u>	<u>2,350</u>
NORTH CAROLINA . . .	4,664	2,620	376	941	51	420	9	247
SOUTH CAROLINA . . .	2,096	1,074	83	489	8	269	5	168
GEORGIA	12,507	7,561	291	1,405	200	399	23	2,628
FLORIDA	30,324	19,597	496	4,409	733	1,270	226	3,593
MISSISSIPPI	1,707	948	45	401	5	214	4	90
ALABAMA	5,896	4,056	140	929	101	552	8	110
TENNESSEE	4,271	2,408	170	856	87	298	10	442
KENTUCKY	1,799	1,050	168	370	5	131	3	72
SOUTHWEST--TOTAL . .	<u>49,902</u>	<u>32,394</u>	<u>1,078</u>	<u>8,592</u>	<u>403</u>	<u>2,374</u>	<u>95</u>	<u>4,966</u>
LOUISIANA	4,454	2,936	109	797	23	244	4	341
OKLAHOMA	11,214	8,624	190	1,672	24	444	10	250
TEXAS	30,247	18,494	631	5,144	336	1,370	73	4,199
NEW MEXICO	1,953	1,114	84	482	11	175	6	81
ARKANSAS	2,034	1,226	64	497	9	141	2	95
WESTERN-PACIFIC--TOTAL	<u>79,225</u>	<u>53,881</u>	<u>1,566</u>	<u>11,251</u>	<u>1,143</u>	<u>2,640</u>	<u>523</u>	<u>8,171</u>
HAWAII	2,965	2,055	55	309	117	191	18	220
CALIFORNIA	67,169	46,120	1,264	9,264	971	1,941	464	7,145
ARIZONA	6,841	4,657	194	1,212	41	336	17	384
NEVADA	2,250	1,049	53	466	14	172	74	422
NORTHWEST-MOUNTAIN--TOTAL .	<u>30,818</u>	<u>18,646</u>	<u>1,263</u>	<u>5,354</u>	<u>362</u>	<u>1,099</u>	<u>168</u>	<u>3,926</u>
WASHINGTON	12,142	7,546	350	1,724	164	426	85	1,847
OREGON	3,656	2,411	235	682	22	112	36	158
IDAHO	1,677	1,030	150	320	8	100	2	67
COLORADO	8,673	4,873	157	1,634	143	233	33	1,600
WYOMING	938	621	30	197	9	31	4	46
UTAH	1,946	1,181	78	383	13	130	5	156
MONTANA	1,786	984	263	414	3	67	3	52
ALASKAN REGION--TOTAL . . .	<u>3,979</u>	<u>2,563</u>	<u>138</u>	<u>659</u>	<u>132</u>	<u>239</u>	<u>4</u>	<u>244</u>
OUTSIDE U.S.--TOTAL . . .	<u>14,365</u>	<u>9,612</u>	<u>137</u>	<u>1,102</u>	<u>1,463</u>	<u>158</u>	<u>90</u>	<u>1,803</u>

ESTIMATED: DATA IS BASED ON A 25-MONTH CRITERIA.

NOTE: PUERTO RICO AND VIRGIN ISLANDS ARE INCLUDED IN OUTSIDE U.S. TOTAL.

1/ DATA FOR CONTROL TOWER OPERATORS, FLIGHT ENGINEERS, AND FLIGHT NAVIGATORS REPRESENT TOTAL ACTIVE RATINGS HELD. DATA FOR DISPATCHERS, MECHANICS, PARACHUTE RIGGERS, AND GROUND INSTRUCTORS, REPRESENT TOTAL RATINGS ISSUED TO DATE. THESE RATINGS RETAIN THEIR VALIDITY.

2/ DOES NOT INCLUDE APPROXIMATELY 15,000 AIR TRAFFIC CONTROLLERS. THEIR MEDICAL CERTIFICATES ARE NO LONGER PROCESSED BY THE CIVIL AEROMEDICAL INSTITUTE (CAMI). THEY ARE BEING PROCESSED BY A SEPARATE SYSTEM, AND WILL BE INCLUDED IN FUTURE COUNTS.

TABLE 7-13 (CONTINUED)

ESTIMATED ACTIVE NONPILOT AIRMEN CERTIFICATES HELD, BY FAA REGION AND STATE:

DECEMBER 31, 1981 1/

FAA REGION AND STATE	TOTAL NONPILOT AIRMEN	MECHANIC	PARACHUTE RIGGER	GROUND INSTRUCTOR	DISPATCHER	CONTROL TOWER OPERATOR 2/	FLIGHT NAVIGATOR	FLIGHT ENGINEER
TOTAL	398,368	262,705	9,716	63,246	7,094	15,528	1,785	38,294
UNITED STATES--TOTAL . . .	<u>384,003</u>	<u>253,093</u>	<u>9,579</u>	<u>62,144</u>	<u>5,631</u>	<u>15,370</u>	<u>1,695</u>	<u>36,491</u>
NEW ENGLAND--TOTAL	<u>19,167</u>	<u>12,691</u>	<u>396</u>	<u>2,953</u>	<u>152</u>	<u>495</u>	<u>196</u>	<u>2,284</u>
MAINE	1,240	745	39	255	14	84	8	95
NEW HAMPSHIRE	1,871	780	31	314	13	89	25	619
RHODE ISLAND	954	621	45	199	7	26	4	52
MASSACHUSETTS	9,097	6,975	188	1,228	71	173	16	446
CONNECTICUT	5,485	3,269	81	818	41	101	140	1,035
VERMONT	520	301	12	139	6	22	3	37
EASTERN--TOTAL	<u>65,198</u>	<u>45,703</u>	<u>1,619</u>	<u>9,526</u>	<u>1,553</u>	<u>2,444</u>	<u>306</u>	<u>4,047</u>
NEW YORK	28,052	20,787	396	3,436	1,163	1,161	102	1,007
PENNSYLVANIA	14,452	10,838	345	2,192	116	309	49	603
VIRGINIA	5,619	2,789	398	1,082	98	459	35	758
MARYLAND	3,446	2,021	131	742	21	172	16	343
WEST VIRGINIA	1,026	615	52	257	3	64	1	34
DELaware	977	663	23	153	6	47	8	77
NEW JERSEY	11,049	7,613	249	1,538	128	214	95	1,212
DISTRICT OF COLUMBIA . . .	577	377	25	126	18	18	0	13
GREAT LAKES--TOTAL	<u>51,351</u>	<u>32,771</u>	<u>1,303</u>	<u>10,243</u>	<u>555</u>	<u>1,909</u>	<u>49</u>	<u>4,521</u>
ILLINOIS	14,911	9,191	289	2,706	252	468	16	1,989
INDIANA	4,855	3,178	197	972	19	259	7	223
MINNESOTA	8,279	5,276	136	1,297	161	187	4	1,218
MICHIGAN	7,971	5,261	207	1,799	45	342	8	309
NORTH DAKOTA	864	522	25	189	2	109	0	17
OHIO	9,849	6,500	289	2,169	54	348	9	480
SOUTH DAKOTA	891	542	26	235	1	56	1	30
WISCONSIN	3,731	2,301	134	876	21	140	4	255
CENTRAL--TOTAL	<u>21,099</u>	<u>15,130</u>	<u>447</u>	<u>3,766</u>	<u>181</u>	<u>617</u>	<u>16</u>	<u>982</u>
KANSAS	6,265	4,512	112	1,105	35	187	5	309
IOWA	2,836	1,908	89	662	11	88	0	78
MISSOURI	10,128	7,509	175	1,560	92	235	7	550
NEBRASKA	1,870	1,201	71	439	3	107	4	45

VIII. GENERAL AVIATION AIRCRAFT

Beginning in 1977, General Aviation Aircraft Activity information was obtained using the General Aviation Activity and Avionics Survey. Heretofore, the activity data were collected from each owner of a registered aircraft using the Aircraft Registration, Eligibility, Identification, and Activity report. Like the old form the survey collects data relative to flight hours, airframe hours and the avionics equipment on board the aircraft. In addition, the survey collects information about the number of hours flown under Instrument Flight Rules, fuel consumption rates, and the state where the aircraft is based.

The 1981 sample of 23,142 aircraft was selected from approximately 258,000 registered general aviation aircraft. The sample is a scientifically designed random sample which represents all general aviation aircraft registered in the United States.

Because the estimates are derived from a sample--not the total population of aircraft--a certain amount of sampling error is introduced. The user must consider this error along with the estimate itself when making an inference or drawing any conclusions about the aircraft population. Although the exact value of the sample error is unknown, a quantity known as the standard error is used to approximate it. Using the standard error one can develop an interval within which the true population estimate will lie with a known probability. The probability that the true value lies within the interval depends on the width of the interval, i.e., the estimate

plus or minus 1, 2, or 3 times the standard error. The table below shows selected interval widths and their corresponding confidence.

<u>Width of Interval</u>	<u>Approximate Confidence That Interval Includes True Value</u>
1 standard error	68%
2 standard errors	95%
3 standard errors	99%

For example, if the estimate for the total number of active piston powered rotorcraft were 2,658 and the standard error were 176, then the 95% confidence interval would be $2,658 \pm 2(176)$ or (2306, 3010). One would say that there is a 95% chance that the number of active piston powered rotorcraft lies between 2306 and 3010.

In some tables the standard error is expressed as a percent. To calculate the standard error multiply the estimate by the percentage. To derive the 95% confidence interval proceed as before. For example, if total hours flown were 35,792 thousand hours and the percentage standard error were 3.0%. The 95% confidence interval is:

$$35,792 \pm (2 \times 3\% \times 35,792) =$$

$$35,792 \pm 2148 =$$

$$(33,644; 37,940)$$

The standard error, percent standard error, or a code for the standard error is shown for each estimate made from the sample in this chapter.

More detailed estimates and a more detailed discussion of the survey and its methodology are available in 1981 General Aviation Activity and Avionics Survey.

TABLE 8.1

ACTIVE GENERAL AVIATION AIRCRAFT TOTAL HOURS FLOWN
BY AIRCRAFT TYPE AND PRIMARY USE
(PERCENT STANDARD ERROR IS SHOWN IN PARENTHESES)
1981

AIRCRAFT TYPE	TOTAL	EXECUTIVE	BUSINESS	PERSONAL	INSTRUCTIONAL	AERIAL APPLICATION	AERIAL OBSERVATION	OTHER WORK	COMMUTER AIR CARRIER	AIR TAXI	RENTAL	OTHER
FIXEDWING--TOTAL	201,201 (A)	16,950 (A)	46,699 (A)	91,384 (A)	14,388 (A)	6,825 (A)	2,636 (B)	974 (C)	1,005 (B)	6,461 (A)	10,122 (A)	3,742 (A)
PISTON--TOTAL	193,370 (A)	12,089 (A)	45,214 (A)	91,305 (A)	14,367 (A)	6,758 (A)	2,621 (B)	970 (C)	755 (B)	5,892 (A)	10,169 (A)	3,331 (B)
ONE-ENGINE	167,898 (A)	5,646 (A)	34,918 (A)	88,525 (A)	13,746 (A)	6,348 (A)	2,171 (B)	936 (C)	160 (D)	3,055 (B)	9,757 (A)	2,632 (B)
TWO-ENGINE	25,356 (A)	6,414 (A)	10,294 (A)	2,774 (B)	620 (C)	361 (D)	446 (C)	33 (D)	595 (C)	2,832 (B)	290 (D)	687 (C)
OTHER PISTON	114 (A)	28 (C)	1 (D)	5 (D)	0 (A)	48 (B)	2 (D)	0 (A)	0 (A)	4 (D)	11 (D)	12 (B)
TURBOPROP--TOTAL	4,660 (A)	2,602 (A)	962 (B)	67 (D)	20 (D)	62 (A)	5 (D)	0 (A)	232 (A)	422 (C)	49 (D)	225 (C)
TWO-ENGINE	4,525 (A)	2,593 (A)	952 (B)	58 (D)	20 (D)	61 (A)	5 (D)	0 (A)	232 (A)	414 (C)	40 (D)	209 (C)
OTHER TURBOPROP	134 (A)	9 (D)	9 (D)	9 (D)	0 (A)	62 (A)	0 (A)	0 (A)	0 (A)	12 (B)	9 (C)	16 (C)
TURBOJET--TOTAL	3,171 (A)	2,252 (A)	522 (B)	11 (D)	0 (A)	0 (A)	10 (D)	4 (D)	18 (D)	136 (D)	18 (B)	190 (B)
TWO-ENGINE	2,808 (A)	2,052 (A)	502 (B)	4 (D)	0 (A)	0 (A)	10 (D)	4 (D)	18 (D)	136 (D)	0 (A)	24 (D)
OTHER TURBOJET	362 (A)	205 (A)	15 (D)	2 (D)	0 (A)	0 (A)	0 (A)	0 (A)	0 (A)	0 (A)	18 (B)	116 (B)
ROTOCRAFT TOTAL	6,974 (A)	1,525 (B)	950 (B)	666 (B)	254 (D)	1,150 (B)	657 (C)	280 (C)	12 (D)	232 (B)	28 (D)	211 (B)
PISTON	3,250 (A)	221 (D)	323 (C)	589 (B)	198 (D)	1,014 (B)	465 (C)	71 (D)	0 (A)	102 (D)	1 (D)	261 (C)
TURBINE	3,724 (A)	1,303 (B)	622 (C)	76 (D)	56 (D)	136 (C)	191 (D)	208 (C)	12 (D)	630 (C)	26 (D)	448 (C)
OTHER--TOTAL	5,049 (A)	106 (D)	65 (D)	3,458 (A)	350 (C)	0 (A)	89 (D)	235 (D)	0 (A)	32 (D)	429 (C)	281 (C)
TOTAL ALL AIRCRAFT	213,226 (A)	18,582 (A)	47,716 (A)	95,510 (A)	14,993 (A)	7,976 (A)	3,384 (B)	1,491 (B)	1,023 (B)	2,226 (A)	10,585 (A)	4,741 (A)

NOTE: ROW AND COLUMN SUMMATION MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

STANDARD ERROR

GREATER THAN	LESS THAN OR EQUAL TO		CODE
	0%	10%	
0%	10%	A	
10%	20%	B	
20%	30%	C	
30%	D		

TABLE 8-2
ACTIVE GENERAL AVIATION AIRCRAFT BY AIRCRAFT TYPE
1977-1981

	1981 (STANDARD ERROR)	1980 (STANDARD ERROR)	1979 (STANDARD ERROR)	1978 (STANDARD ERROR)	1977 (STANDARD ERROR)
FIXED-WING--TOTAL	201,201 (1045)	200,097 (923)	199,703 (768)	189,433 (1,061)	175,451
PISTON--TOTAL	193,370 (1042)	193,014 (921)	193,470 (767)	183,823 (1,258)	170,783 (1,015)
ONE ENGINE	167,898 (995)	168,435 (874)	168,390 (745)	160,651 (1,214)	149,300 (1,002)
TWO ENGINE	25,356 (306)	24,366 (290)	24,850 (181)	22,950 (329)	21,301 (165)
OTHER PISTON	114 (29)	212 (17)	229 (11)	221 (10)	182 (11)
TURBOPROP--TOTAL	4,660 (49)	4,090 (46)	3,579 (21)	3,130 (69)	2,890 (20)
TWO ENGINE	4,525 (49)	3,966 (45)	3,482 (20)	3,073 (68)	2,825 (20)
OTHER TURBOPROP	134 (5)	123 (10)	96 (3)	56 (3)	64 (4)
TURBOJET--TOTAL	3,171 (72)	2,992 (40)	26,653 (30)	2,480 (44)	2,277 (22)
TWO ENGINE	2,808 (68)	2,551 (37)	2,309 (29)	2,115 (27)	1,959 (19)
OTHER TURBOJET	362 (23)	441 (13)	343 (6)	364 (34)	318 (10)
ROTORCRAFT--TOTAL	6,974 (189)	6,001 (142)	5,864 (136)	5,315 (119)	4,726 (179)
PISTON	3,250 (173)	2,794 (133)	3,123 (127)	2,882 (115)	2,658 (176)
TURBINE	3,724 (76)	3,207 (49)	2,740 (50)	2,492 (30)	2,067 (27)
OTHER--TOTAL	5,049 (179)	4,945 (142)	4,770 (114)	4,028 (75)	3,616 (69)
TOTAL ALL AIRCRAFT	213,226 (1078)	211,045 (945)	210,339 (789)	199,178 (1,269)	184,294 (1,034)

NOTE: COLUMNS MAY NOT ADD TO TOTALS DUE TO ROUNDING AND ESTIMATION PROCEDURES.

TABLE 8-5

ACTIVE GENERAL AVIATION AIRCRAFT TOTAL HOURS FLown
BY AIRCRAFT TYPE AND PRIMARY USE
(PERCENT STANDARD ERROR IS SHOWN IN PARENTHESES)
1981

Aircraft Type	Total	Executive	Business	Pleasure	Instructional	Aerial Application	Aerial Observation	Owner Name	Computer Air Charter	Air Taxi	Rental	Other
FIGHTER-TOTAL	21,622,522 (11.7%)	5,261,589 (5.2%)	2,852,521 (3.7%)	2,978,299 (2.8%)	5,363,983 (7.0%)	2,059,377 (5.6%)	1,056,709 (16.7%)	262,452 (22.9%)	2,456,819 (8.5%)	2,688,721 (8.9%)	532,323 (12.1%)	
PISTON-TOTAL	26,065,659 (11.8%)	3,226,502 (12.4%)	2,205,322 (13.9%)	2,563,932 (2.8%)	5,480,634 (7.0%)	2,450,388 (5.7%)	1,069,361 (16.8%)	266,325 (20.5%)	2,156,058 (9.1%)	2,657,215 (8.9%)	538,294 (13.7%)	
ONE-SEATER	22,682,086 (12.1%)	1,268,371 (13.8%)	5,305,829 (4.7%)	2,665,278 (2.9%)	5,268,467 (7.2%)	1,386,631 (5.7%)	912,000 (18.5%)	130,265 (23.5%)	1,07,157 (47.6%)	1,588,810 (9.1%)	308,426 (16.8%)	
TURBO-PISTON	6,358,857 (3.5%)	2,058,608 (8.0%)	1,876,582 (6.4%)	204,612 (13.6%)	164,363 (25.3%)	55,645 (31.7%)	169,562 (13.2%)	13,024 (22.8%)	95,638 (11.8%)	1,021,352 (11.8%)	51,522 (22.4%)	
OTHER PISTON	26,705 (25.3%)	3,931 (22.0%)	81 (43.9%)	81 (0.0%)	1 (0.0%)	5,218 (16.5%)	221 (44.6%)	0 (0.0%)	0 (0.0%)	8,479 (51.0%)	2,051 (22.3%)	
TURBOPROP-TOTAL	2,154,526 (3.8%)	1,051,593 (7.1%)	911,495 (6.9%)	18,821 (60.1%)	1,816 (86.3%)	90,505 (27.9%)	2,656 (159.9%)	0 (0.0%)	289,522 (11.9%)	128,912 (21.7%)	15,775 (55.5%)	
ROTARY ENGINE	2,051,380 (3.9%)	1,050,323 (7.2%)	965,778 (17.0%)	11,006 (68.8%)	1,036 (84.3%)	0 (0.0%)	2,626 (159.9%)	0 (0.0%)	289,522 (11.9%)	120,225 (22.4%)	13,727 (67.8%)	
OTHER TURBOPROP	102,586 (17.9%)	2,381 (33.6%)	6,182 (61.4%)	1,351 (44.2%)	0 (0.0%)	90,525 (27.9%)	0 (0.0%)	0 (0.0%)	8,475 (11.9%)	1,465 (11.8%)	1,331 (31.4%)	
TURBOPROP-TOTAL	1,387,387 (3.6%)	324,102 (4.0%)	284,001 (15.5%)	362 (56.1%)	— (0.0%)	0 (0.0%)	5,253 (123.5%)	3,116 (207.7%)	810 (116.2%)	58,313 (34.0%)	21,923 (33.2%)	
ROTARY ENGINE	1,238,071 (3.9%)	904,923 (5.2%)	225,828 (15.8%)	85 (127.2%)	0 (0.0%)	0 (0.0%)	5,259 (125.5%)	3,116 (207.7%)	810 (116.2%)	58,313 (34.0%)	21,923 (33.2%)	
OTHER TURBOPROP	189,315 (10.6%)	88,483 (11.2%)	16,113 (59.5%)	115 (43.6%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	21,923 (16.5%)	
ROTORCRAFT-TOTAL	2,688,921 (6.9%)	926,588 (17.9%)	278,512 (27.7%)	33,841 (21.0%)	29,772 (32.4%)	366,866 (14.9%)	255,281 (28.7%)	159,560 (25.0%)	9,512 (104.7%)	322,351 (22.4%)	4,032 (104.0%)	
PISTON	250,488 (11.6%)	121,458 (13.3%)	90,020 (61.2%)	26,514 (23.4%)	63,360 (32.6%)	30,833 (16.2%)	161,021 (38.7%)	16,165 (55.5%)	52,029 (0.0%)	22,923 (59.7%)	2,024 (204.1%)	
TURBINE	1,754,922 (8.5%)	815,533 (19.5%)	189,136 (36.4%)	8,708 (57.5%)	10,482 (89.5%)	33,621 (26.5%)	165,118 (46.1%)	146,253 (28.8%)	9,622 (104.7%)	320,352 (24.1%)	3,533 (108.8%)	
ONE-SEATER	251,282 (8.6%)	13,228 (94.4%)	6,225 (33.1%)	208,282 (8.8%)	28,462 (37.3%)	0 (0.0%)	34,985 (50.7%)	12,850 (52.5%)	0 (0.0%)	3,224 (95.7%)	26,773 (94.1%)	
TOTAL ALL AIRCRAFT	50,703,758 (11.6%)	6,189,707 (4.0%)	8,122,350 (5.0%)	8,281,231 (2.4%)	5,526,738 (4.6%)	2,497,166 (4.9%)	1,010,915 (11.4%)	268,608 (12.5%)	978,791 (7.7%)	2,808,784 (4.8%)	3,768,116 (5.9%)	

Note: Row and column summations may differ from printed totals due to estimation procedures.

TABLE 8.4

ACTIVE GENERAL AVIATION AIRCRAFT TOTAL HOURS FLOWN BY AIRCRAFT TYPE
 1977+1981
 (HOURS IN THOUSANDS)

	1981 (STANDARD ERROR)	1980 (STANDARD ERROR)	1979 (STANDARD ERROR)	1978 (STANDARD ERROR)	1977 (STANDARD ERROR)
FIXED WING++TOTAL	37,628 (632)	38,318 (635)	40,432 (610)	36,844 (1,188)	33,679 (1,064)
PISTON++TOTAL	34,086 (625)	34,747 (627)	37,303 (604)	34,043 (1,185)	30,965 (1,036)
ONE ENGINE	27,692 (588)	28,339 (585)	30,289 (569)	27,857 (1,144)	24,916 (1,036)
TWO ENGINE	6,369 (210)	6,277 (224)	6,861 (202)	6,082 (306)	5,951 (227)
OTHER PISTON	25 (6)	130 (18)	152 (15)	104 (7)	96 (5)
TURBOPROP++TOTAL	2,155 (82)	2,240 (79)	1,871 (73)	1,606 (80)	1,549 (71)
TWO ENGINE	2,092 (82)	2,183 (78)	1,827 (73)	1,582 (80)	1,517 (70)
OTHER TURBOPROP	63 (11)	56 (10)	45 (2)	24 (3)	32 (5)
TURBOJET++TOTAL	1,382 (50)	1,332 (59)	1,259 (40)	1,194 (53)	1,165 (50)
TWO ENGINE	1,238 (48)	1,163 (52)	1,125 (39)	1,019 (44)	1,043 (49)
OTHER TURBOJET	149 (16)	169 (27)	134 (9)	176 (30)	122 (11)
ROTORCRAFT++TOTAL	2,685 (185)	2,338 (138)	2,555 (146)	2,228 (157)	1,868 (129)
PISTON	930 (108)	736 (75)	892 (97)	806 (79)	609 (90)
TURBINE	1,754 (150)	1,603 (116)	1,664 (108)	1,421 (135)	1,259 (95)
OTHER++TOTAL	391 (34)	359 (21)	353 (29)	338 (20)	295 (16)
TOTAL ALL AIRCRAFT	40,704 (659)	41,016 (650)	43,340 (627)	39,409 (1,199)	35,791 (1,073)

NOTE: COLUMNS MAY NOT ADD TO TOTALS DUE TO ROUNDING AND ESTIMATION PROCEDURES.

TABLE 8.5
ACTIVE GENERAL AVIATION AIRCRAFT AVERAGE HOURS FLown BY AIRCRAFT TYPE
1977-1981

	1981 (STANDARD ERROR)	1980 (STANDARD ERROR)	1979 (STANDARD ERROR)	1978 (STANDARD ERROR)	1977 (STANDARD ERROR)
FIXED-WING--TOTAL	184.4 (3.1)	187.7 (3.1)	200.2 (3.0)	193.7 (5.8)	191.5 (5.9)
PISTON--TOTAL	175.4 (3.2)	178.2 (3.1)	191.8 (3.0)	184.3 (5.9)	181.5 (6.1)
ONE-ENGINE	165.8 (3.4)	168.2 (3.4)	180.2 (3.3)	172.4 (6.6)	186.5 (6.8)
TWO-ENGINE	251.1 (7.7)	254.8 (8.4)	273.2 (7.6)	263.7 (12.3)	280.4 (10.4)
OTHER PISTON	197.0 (3.5)	625.4 (38.8)	650.4 (27.9)	477.4 (22.0)	628.8 (21.3)
TURBOPROP--TOTAL	470.1 (17.9)	433.4 (16.1)	511.7 (18.4)	509.2 (23.4)	533.4 (23.5)
TWO-ENGINE	469.4 (18.2)	534.8 (16.4)	513.1 (19.0)	510.7 (23.8)	534.5 (24)
OTHER TURBOPROP	498.8 (92.4)	487.4 (73.1)	465.0 (2.9)	424.8 (6.6)	481.9 (8.5)
TURBOJET--TOTAL	436.3 (12.5)	443.6 (16.6)	473.2 (14.0)	475.2 (17.9)	509.0 (20.2)
TWO-ENGINE	442.6 (13.6)	456.1 (18.4)	487.5 (15.8)	481.1 (19.1)	527.7 (22.4)
OTHER TURBOJET	376.5 (22.7)	349.9 (29.1)	382.2 (21.3)	432.1 (51.1)	385.0 (42.2)
ROTORCRAFT--TOTAL	390.8 (26.2)	382.4 (20.7)	433.5 (22.8)	422.1 (28.5)	396.5 (25.5)
PISTON	285.3 (29.3)	262.9 (20.9)	284.3 (27.2)	285.6 (23.6)	230.5 (29.6)
TURBINE	489.5 (42.6)	497.7 (35.4)	609.3 (38.1)	571.0 (53.8)	608.3 (44.1)
OTHER--TOTAL	78.4 (6.3)	75.0 (3.9)	72.7 (5.2)	83.7 (4.2)	67.8 (4.2)
TOTAL ALL AIRCRAFT	188.1 (3.1)	190.5 (3.0)	203.5 (2.9)	197.7 (5.6)	194.2 (5.7)

TABLE 8-6

ACTIVE GENERAL AVIATION AIRCRAFT AND HOURS FLOWN
BY FAA REGION AND STATE OF BASED AIRCRAFT
1981

FAA REGION AND STATE	ACTIVE AIRCRAFT		HOURS Flown	
	AIRCRAFT	STANDARD ERROR	HOURS (000)	STANDARD ERROR (000)
TOTAL	213,226	1,078	40,704	659
ALASKAN REGION--TOTAL .	6,450	533	1,166	158
CENTRAL--TOTAL	14,489	858	2,373	211
IOWA	3,747	446	620	104
KANSAS	3,932	458	620	118
MISSOURI	4,465	491	706	117
NEBRASKA	2,343	350	420	103
EASTERN--TOTAL	21,988	1,023	3,858	277
DELAWARE	549	164	70	31
DISTRICT OF COLUMBIA .	54	34	14	11
MARYLAND	2,645	380	359	75
NEW JERSEY	3,659	443	694	134
NEW YORK	5,687	541	914	127
PENNSYLVANIA	5,666	530	994	153
VIRGINIA	2,784	382	606	142
WEST VIRGINIA	942	220	182	62
GREAT LAKES--TOTAL . . .	41,498	1,355	6,938	395
ILLINOIS	8,692	670	1,520	195
INDIANA	4,285	476	713	120
MICHIGAN	7,430	619	1,190	178
MINNESOTA	5,417	532	737	107
NORTH DAKOTA	1,709	305	237	53
OHIO	8,406	657	1,509	2,437
SOUTH DAKOTA	1,125	242	155	51
WISCONSIN	4,432	482	869	162
NEW ENGLAND--TOTAL . . .	7,224	615	1,264	162
CONNECTICUT	1,686	301	311	83
MAINE	1,156	247	123	43
MASSACHUSETTS	2,409	362	381	85
NEW HAMPSHIRE	1,202	258	338	116
RODE ISLAND	320	127	43	22
VERMONT	447	151	63	26

TABLE 8-6 (CONTINUED)

ACTIVE GENERAL AVIATION AIRCRAFT AND HOURS FLOWN
BY FAA REGION AND STATE OF BASED AIRCRAFT
1981

FAA REGION AND STATE	ACTIVE AIRCRAFT		HOURS FLOWN	
	AIRCRAFT	STANDARD ERROR	HOURS (000)	STANDARD ERROR (000)
NORTHWEST MOUNTAIN--TOTAL	24,708	1,084	4,285	306
COLORADO	5,498	537	1,091	187
IDAHO	2,349	358	394	90
MONTANA	2,463	379	307	67
OREGON	5,640	533	1,022	160
UTAH	1,508	289	262	72
WASHINGTON	6,048	552	930	139
WYOMING	1,142	246	250	98
SOUTHERN--TOTAL . . .	33,331	1,229	7,841	473
ALABAMA	2,980	398	433	83
FLORIDA	12,863	795	3,282	346
GEORGIA	4,477	483	1,117	198
KENTUCKY	1,687	295	360	107
MISSISSIPPI	2,132	335	412	93
NORTH CAROLINA	4,300	474	1,003	169
PUERTO RICO	124	69	38	16
SOUTH CAROLINA	1,870	320	365	87
TENNESSEE	2,730	385	749	177
SOUTHWEST--TOTAL . . .	33,440	1,209	7,280	411
ARKANSAS	2,486	350	519	107
LOUISIANA	3,908	437	1,552	248
NEW MEXICO	2,247	344	502	109
OKLAHOMA	5,185	524	862	151
TEXAS	19,481	952	3,753	287
WESTERN PACIFIC--TOTAL.	38,074	1,282	6,694	425
ARIZONA	4,976	510	873	155
CALIFORNIA	30,873	1,179	5,204	388
HAWAII	623	181	288	131
NEVADA	1,520	267	295	73
OTHER U.S. TERRITORIES.	54	54	15	16
FOREIGN--TOTAL . . .	594	151	201	78

NOTE: COLUMN TOTALS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

IX. AIRCRAFT ACCIDENTS

The data presented in this chapter were obtained from the following sources:

Accidents: National Transportation Safety Board.

Air Carrier Miles Flown: National Transportation Safety Board.

Estimated General Aviation Hours and Miles Flown: Federal Aviation Administration.

The Safety Board's statistics for the first time categorize air carrier accidents according to the Federal air regulations under which the accident flights were made. The new groupings are (1) large airlines in scheduled service under "Part 121" of the regulations; (2) commuter carriers in scheduled service under Part 135; (3) "on-demand" air taxis in unscheduled operations under Part 135; and (4) general aviation -- all other civil flying.

The changes in category were dictated by deregulation and by the proliferation of small, regional airlines and commuters. Commuter carriers and on-demand air taxis until 1981 had been classified as a part of general aviation.

As defined by the National Transportation Safety Board, an aircraft accident is: "an occurrence associated with the operation of an aircraft which takes place between the time any person boards the aircraft with the intention of flight until such time as all such persons have disembarked, and in which any person suffers death or serious injury as a result of being in or upon the aircraft or by direct contact with the aircraft or anything attached thereto, or in which the aircraft receives substantial damage."

Fatal injury means any injury which results in death within 7 days of the accident.

Operator means any person who causes or authorizes the operation of an aircraft, such as the owner, lessee, or bailee of an aircraft.

Serious injury means any injury which (1) requires hospitalization for more than 48 hours, commencing within 7 days from the date the injury was received; (2) results in a fracture of any bone (except simple fractures of fingers, toes, or nose); (3) involves lacerations which cause severe hemorrhages, nerve, muscle, or tendon damage; (4) involves injury to any internal organ; or (5) involves second- or third-degree burns, or any burns affecting more than 5 percent of the body surface.

Substantial damage:

(1) Except as provided in subparagraph (2) of this paragraph, substantial damage means damage or structural failure which adversely affects the structural strength, performance, or flight characteristics of the aircraft, and which would normally require major repair or replacement of the affected component.

(2) Engine failure, damage limited to an engine, bent fairings or cowling, dented skin, small puncture holes in the skin or fabric, ground damage to rotor or propeller blades, damage to landing gear, wheels, tires, flaps, engine accessories, brakes or wingtips are not considered substantial damage for the purpose of this part.

More detailed accident data may be obtained from the National Transportation Safety Board, Bureau of Technology.

TABLE 9.1

1981 AIR CARRIER AND GENERAL AVIATION
 AIRCRAFT ACCIDENTS, FATALITIES AND FATALITY RATE --
 (PRELIMINARY DATA)

AIR CARRIER AND GENERAL AVIATION OPERATIONS	NUMBER OF ACCIDENTS		NUMBER OF FATALITIES
	TOTAL	FATAL	
AIR CARRIERS ^{1/}			
AIR CARRIERS OPERATING UNDER 14 CFR 121			
SCHEDULED	24	4	4
UNSCHEDULED	1	0	0
AIR CARRIERS OPERATING UNDER 14 CFR 135			
SCHEDULED ^{2/}	28	9	35
NONSCHEDULED ^{3/}	138	34	95
GENERAL AVIATION*	3,634	662	1,265

* INCLUDES ACCIDENTS INVOLVING AIRCRAFT FLOWN UNDER RULES OTHER THAN 14 CFR 121 AND 14 CFR 135.

SOURCE: NATIONAL TRANSPORTATION SAFETY BOARD.

^{1/}AIRLINES

^{2/}COMMUTERS

^{3/}ON-DEMAND AIR TAXIS

TABLE 9.2
FATAL ACCIDENTS, FATALITIES -- ALL SCHEDULED SERVICE
AIRLINES, 1980 AND 1981*
(U.S. AIR CARRIERS OPERATING UNDER 14 CFR 121)

LOCATION	OPERATOR	DATE	SERVICE	AIRCRAFT	TOTAL	FATALITIES PASSENGER	CREW	OTHERS	TOTAL ABOARD	REPORTED TYPE OF ACCIDENT
Total 1980 (R)					1	---	---	1	4	
SAN DIEGO, CA	TRANSAMERICA AIRLINES	8/23	CARGO	L-382	1	---	---	1	4	HIT PARACHUTIST IN FLIGHT.
Total 1981					4	1	1	2	758	
MIAMI, FL	EASTERN AIR LINES, INC.	2/6	Psg	A300	1	0	0	1	49	LINE MECHANIC FATALLY INJURED WHILE SERVICING NOSE GEAR DOORS.
	PAN AMERICAN WORLD AIRWAYS, INC.	5/20	Psg	DC-10	1	0	0	1	87	GROUND CREWMAN RUN OVER DURING PUSHBACK.
	AMERICAN AIR LINES, INC.	9/7	Psg	DC-10	1	1	0	0	277	PASSENGER FELL FROM BOARDING RAMP.
SALT LAKE CITY, UT	WORLD AIRWAYS, INC.	9/19	Psg	DC-10	1	0	1	0	345	FLIGHT ATTENDANT CRUSHED BY GALLEY PERSONNEL LIFT DOOR.

* PRELIMINARY
(R) REVISED

TABLE 9.3
 ACCIDENTS, FATALITIES, AND RATES--ALL SCHEDULED SERVICE
AIRLINES: 1972 - 1981
 (U.S. AIR CARRIERS OPERATING UNDER 14 CFR 121)

YEAR	NUMBER OF ACCIDENTS		FATALITIES	AIRCRAFT MILES Flown (000)	ACCIDENT RATE PER MILLION AIRCRAFT MILES Flown	
	TOTAL	FATAL			TOTAL ACCIDENTS	FATAL ACCIDENTS ^{1/}
1972R	46	7	186	2,348	0.02	0.00
1973R	36	8	221	2,448	0.02	0.00
1974R	43	7	460	2,258	0.02	0.00
1975R	31	2	122	2,241	0.01	0.00
1976R	22	2	38	2,320	0.01	0.00
1977R	21*	3	78	2,419	0.01	0.00
1978R	21*	5*	160	2,520	0.01	0.00
1979R	24*+	4	135	2,736	0.01	0.00
1980R	15	0	0	2,890	0.01	0.00
1981P	24++	4	4	2,695	0.01	0.00

^{1/}ROUNDED TO 0.00

+ CONTAINS ONE ACCIDENT INVOLVING A DEREGULATED ALL CARGO AIR CARRIER.

* CONTAINS ONE ACCIDENT INVOLVING A SCHEDULED COMMERCIAL OPERATOR.

++ CONTAINS TWO ACCIDENTS INVOLVING DEREGULATED ALL CARGO AIR CARRIERS.

P - PRELIMINARY.

R - REVISED.

NOTE: SABOTAGE ACCIDENT OCCURRING 9/8/74 IS INCLUDED IN ALL COMPUTATIONS
 EXCEPT RATES.

SOURCE: NATIONAL TRANSPORTATION SAFETY BOARD.

TABLE 9.4

AIRCRAFT ACCIDENTS, ACCIDENT RATES, AND FATALITIES**
U.S. CERTIFICATED ROUTE AIR CARRIERS: 1972-1981*

YEAR	NUMBER OF ACCIDENTS		AIRCRAFT MILES FLOWN (000)	ACCIDENT RATE PER MILLION AIRCRAFT MILES FLOWN		FATALITIES		
	TOTAL	FATAL		TOTAL ACCIDENTS	FATAL ACCIDENTS	TOTAL	PASSENGERS	CREW AND OTHERS
1972	48	8	2,526,021	0.019	0.003	190	160	30
1973	40	8	2,655,732	0.016	0.003	221	197	24
1974	45	8	2,584,933	0.018	0.003	463	420	43
1975	36	2	2,357,425	0.015	0.001	122	113	9
1976	25	3	2,448,413	0.010	0.001	42	39	3
1977	21	4	2,556,080	0.008	0.002	652	381(R)	271(R)
1978	22	5	2,625,000	0.008	0.002	19	13	6
1979	26	5	2,803,389	0.009	0.002	352	323	29
1980	16	1	2,966,000	0.005	**	13	11	2
1981	*	*	*	*	*	*	*	*

NOTE: SABOTAGE ACCIDENT (9/8/74) IS INCLUDED IN ALL COMPUTATIONS EXCEPT RATES. IN 1977,
FATALITIES (OTHER) INCLUDES 248 ON AIRCRAFT OF FOREIGN REGISTRY.

SOURCE: NATIONAL TRANSPORTATION SAFETY BOARD.

* DATA NO LONGER AVAILABLE. SEE EXPLANATION IN INTRODUCTORY PAGE TO THIS CHAPTER.

** ROUNDED TO .000

(R) REVISED

TABLE 9.5

AIRCRAFT ACCIDENTS, FATALITIES, AND FATALITY RATE--U.S. CERTIFIED ROUTE AIR CARRIER
SCHEDULED DOMESTIC AND INTERNATIONAL PASSENGER SERVICE: 1972-1981

AIRCRAFT ACCIDENTS			FATALITIES			PASSENGERS CARRIED	PASSENGER- MILES FLOWN (000)	PASSENGER FATALITY RATE PER 100 MILLION PASSENGER-MILES
YEAR	TOTAL	FATAL	TOTAL	PASSENGER	CREW AND OTHERS			
1972	43	7	186	160	26	188,938,932	159,722,015	0.100
1973	32	6	217	197	20	202,207,000	171,436,549	0.115
1974	42	7	460	420	40	207,449,006	173,349,894	0.197
1975	28	2	122	113	9	205,059,571	174,173,138	0.065
1976	21	2	38	36	2	223,313,131	190,915,721	0.019
1977	17	2	75	64	11	240,326,516	206,205,410	0.031
1978	19	4	16	13	3	274,717,832	238,987,489	0.005
1979	17	5	352	323	29	316,638,000	261,979,204	0.123
1980	14	1	13	11	2	303,200,000	283,100,000	0.004
1981	*	*	*	*	*	*	*	*

NOTE: PASSENGER DEATHS OCCURRING IN SABOTAGE ACCIDENTS ARE INCLUDED IN THE PASSENGER FATALITY COLUMN,
BUT ARE EXCLUDED IN THE COMPUTATION OF FATALITY RATES (1974-1979 PASSENGERS).

SOURCE: NATIONAL TRANSPORTATION SAFETY BOARD.

* DATA NO LONGER AVAILABLE. SEE INTRODUCTORY PAGE AT THE BEGINNING OF THIS CHAPTER.

TABLE 9.6
AIRCRAFT ACCIDENTS, FATALITIES, AND FATALITY RATE--U.S. CERTIFICATED ROUTE AIR CARRIER
SCHEDULED DOMESTIC PASSENGER SERVICE: 1972-1981

YEAR	AIRCRAFT ACCIDENTS		FATALITIES			PASSENGERS CARRIED	PASSENGER- MILES FLOWN (000)	PASSENGER FATALITY RATE PER 100 MILLION PASSENGER-MILES
	TOTAL	FATAL	TOTAL	PASSENGER	CREW AND OTHERS			
1972	37	6	185	160	25	169,931,415	123,775,960	0.129
1973	27	4	138	128	10	183,271,000	133,733,181	0.096
1974	31	3	168	158	10	189,723,697	137,657,951	0.115
1975	21	2	122	113	9	188,743,983	140,299,953	0.081
1976	17	1	1	1	---	206,274,000	154,322,683	0.001
1977	15	2	75	64	11	222,283,516	166,424,934	0.038
1978	18	4	16	13	3	253,957,000	218,548,679	0.006
1979	14	4	279	262	17	292,537,000	208,856,162	0.125
1980	8	1	13	11	2	278,600,000	221,200,000	0.005
1981	*	*	*	*	*	*	*	*

* DATA NO LONGER AVAILABLE. SEE EXPLANATION ON INTRODUCTORY PAGE TO THIS CHAPTER.

SOURCE: NATIONAL TRANSPORTATION SAFETY BOARD.

TABLE 9.7
ACCIDENTS, FATALITIES AND FATALITY RATE--U.S. CERTIFICATED ROUTE AIR CARRIER
SCHEDULED INTERNATIONAL PASSENGER SERVICE: 1972-1981

YEAR	ACCIDENTS		FATALITIES			PASSENGERS CARRIED	PASSENGER-MILES FLOWN (000)	PASSENGER FATALITY RATE PER 100 MILLION PASSENGER-MILES
	TOTAL	FATAL	TOTAL	PASSENGER	CREW AND OTHERS			
1972	6	1	1	---	1	19,007,517	35,946,055	---
1973	5	2	79	69	10	18,936,000	37,703,368	0.183
1974	12	4	292	262	30	17,725,309	35,691,093	0.513
1975	7	---	---	---	---	16,315,588	33,873,185	---
1976	4	1	37	35	2	17,039,131	36,593,038	0.096
1977	3	---	---	---	---	18,043,000	39,780,476	---
1978	1	---	---	---	---	20,759,000	46,384,140	---
1979	4	1	73	61	12	24,146,000	53,123,042	0.115
1980	6	---	---	---	---	24,600,000	61,900,000	---
1981	*	*	*	*	*	*	*	*

NOTE: PASSENGER DEATHS OCCURRING IN SABOTAGE ACCIDENTS ARE INCLUDED IN PASSENGER FATALITY COLUMN BUT EXCLUDED IN THE COMPUTATION OF PASSENGER FATALITY RATES (1974-79 PASSENGERS).

SOURCE: NATIONAL TRANSPORTATION SAFETY BOARD.

* DATA NO LONGER AVAILABLE. SEE INTRODUCTORY PAGE TO THIS CHAPTER.

TABLE 9.8
ACCIDENTS, ACCIDENT RATES, AND FATALITIES--U.S. SUPPLEMENTAL AIR CARRIERS
ALL OPERATIONS: 1972-1981

YEAR	NUMBER OF ACCIDENTS		AIRCRAFT MILES Flown (000) (A)	ACCIDENT RATE PER MILLION AIRCRAFT MILES Flown			FATALITIES		
	TOTAL	FATAL		AIRCRAFT ACCIDENTS	FATAL ACCIDENTS	TOTAL	PASSENGERS	CREW AND OTHERS	
1972	2	---	93,022	0.022	---	---	---	---	---
1973	3	1	90,937	0.033	0.011	6	3	3	
1974	2	1	79,363	0.025	0.013	4	1	3	
1975	2	---	65,476	0.031	---	---	---	---	
1976	1	---	62,640	0.016	---	---	---	---	
1977	2	---	67,699	0.030	---	---	---	---	
1978	2	---	69,946	0.029	---	---	---	---	
1979	1	1	61,492	0.016	0.016	3	---	3	
1980	3	1	59,000	0.051	0.017	1	---	1	
1981	*	*	*	*	*	*	*	*	

(A) NONREVENUE MILES NOT REPORTED.

SOURCE: NATIONAL TRANSPORTATION SAFETY BOARD.

- * DATA NO LONGER AVAILABLE; SEE EXPLANATION ON INTRODUCTORY PAGE TO THIS CHAPTER.

TABLE 9.9
AIRCRAFT ACCIDENTS, FATALITIES AND FATALITY RATE--U.S. SUPPLEMENTAL AIR CARRIER
CIVIL AND MILITARY OPERATIONS: 1972-1981

YEAR	ACCIDENTS			FATALITIES	PASSENGER CARRIED	PASSENGER-MILES FLOWN (000)	PASSENGER FATALITY RATE PER 100 MILLION PASSENGER-MILES
	TOTAL	FATAL	TOTAL	PASSENGER	CREW		
1972	--	--	--	--	--	3,473,599	10,049,683
1973	1	--	--	--	--	3,569,912	11,790,513
1974	1	--	--	--	--	3,194,463	10,862,449
1975	1	--	--	--	--	2,352,423	8,759,279
1976	1	--	--	--	--	2,191,661	8,199,053
1977	2	--	--	--	--	2,793,761	9,983,404
1978	2	--	--	--	--	2,950,865	9,999,037
1979	--	--	--	--	--	2,590,855	8,956,918
1980	--	--	--	--	*	2,300,000	7,900,000
1981	*	*	*	*	*	*	*

SOURCE: NATIONAL TRANSPORTATION SAFETY BOARD.

* DATA NO LONGER AVAILABLE. SEE CHAPTER INTRODUCTION.

TABLE 9.10

AIRCRAFT ACCIDENTS, FATALITIES AND ACCIDENT RATES--
U.S. GENERAL AVIATION FLYING: 1972-1981

YEAR	ACCIDENTS		FATALITIES	AIRCRAFT HOURS FLOWN (000)	ACCIDENT RATES	
	TOTAL	FATAL			100,000 AIRCRAFT HOURS	
					TOTAL	FATAL
1972R	*4,109	*653(A)	1,305(B)	24,419	16.8	2.67
1973R	*4,090	*679(A)	1,299	26,908	15.2	2.52
1974R	*4,234	*689(A)	1,327	27,774	15.2	2.47
1975R	*4,034	*638(A)	1,247	28,336	14.2	2.24
1976R	*4,005	*648(A)	1,187	29,975	13.3	2.15
1977R	*4,069	*658(A)	1,281	31,585	12.9	2.08
1978R	*4,223	*723(A)	1,563(B)	34,985	12.1	2.07
1979R	*3,800	*629(A)	1,219	38,767	9.8	1.62
1980R	*3,599	*629(A)	1,264	37,480	9.6	1.68
1981P	3,634	662	1,265	36,280	10.0	1.82

(A) SUICIDE/SABOTAGE ACCIDENTS ARE INCLUDED IN ALL COMPUTATIONS EXCEPT FOR RATES (1972-3, 1973-2, 1974-2, 1975-2, 1976-4, 1977-1, 1978-2, 1979-0).

(B) INCLUDES AIR CARRIER FATALITIES (1972-5, 1978-142) WHEN IN COLLISION WITH GENERAL AVIATION AIRCRAFT.

SOURCE: NATIONAL TRANSPORTATION SAFETY BOARD.

P - PRELIMINARY.

R - REVISED.

* AS OF 1981 GENERAL AVIATION NO LONGER INCLUDES AIR TAXI (COMMUTER AIR CARRIER AND ON-DEMAND AIR TAXI) ACCIDENTS. THE NUMBER OF TOTAL ACCIDENTS, FATAL ACCIDENTS, FATALITIES, AND AIRCRAFT HOURS FLOWN AND ACCIDENT RATES FOR THE YEARS 1972-1980 HAVE BEEN ADJUSTED TO ACCOMMODATE THE EXCLUSION OF AIR TAXI ACCIDENTS AND AIR TAXI HOURS FLOWN.

TABLE 9.11

AIRCRAFT ACCIDENTS, FATALITIES AND ACCIDENT RATES
 COMMUTER AIR CARRIERS: 1977 - 1981
 (U.S. AIR CARRIERS OPERATING UNDER 14 CFR 135)
 ALL SCHEDULED SERVICE

	1977R	1978R	1979R	1980R	1981P
<u>ACCIDENTS</u>					
TOTAL	42	55	51	37	28
FATAL	9	13	14	7	9
<u>FATALITIES</u>	33	47	65	36	35
<u>AIRCRAFT HOURS Flown (000)*</u>	1,144	1,288	1,262	1,263	1,083
<u>AIRCRAFT MILES Flown (000)</u>	194,166	224,228	214,330	202,100	178,500
<u>REVENUE PASSENGER MILES Flown (000)</u>	1/	1/	1/	1/	1/
<u>DEPARTURES*</u>	1,728,948	1,978,483	2,005,800	1,895,400	1,708,800
<u>ACCIDENT RATE PER 100,000 HOURS Flown**</u>					
TOTAL	3.67	4.27	4.04	2.93	2.59
FATAL	0.79	1.01	1.11	0.55	0.83
<u>ACCIDENT RATE PER MILLION MILES Flown**</u>					
TOTAL	0.22	0.25	0.24	0.18	0.16
FATAL	0.05	0.06	0.07	0.03	0.05
<u>ACCIDENT RATE PER 100,000 DEPARTURES**</u>					
TOTAL	2.43	2.78	2.54	1.95	1.64
FATAL	0.52	0.66	0.70	0.37	0.53
<u>PASSENGER FACILITY RATE PER 100 MILLION PASSENGER MILES*</u>	1/	1/	1/	1/	1/

P - PRELIMINARY DATA

R - REVISED DATA

* EXPOSURE DATA ESTIMATES FROM CAB.

** RATES ARE BASED ON ALL ACCIDENTS INCLUDING THOSE ACCIDENTS INVOLVING OPERATORS NOT REPORTING TRAFFIC DATA TO THE CAB.

SOURCE: NATIONAL TRANSPORTATION SAFETY BOARD

1/ DATA NO LONGER AVAILABLE. SEE CHAPTER INTRODUCTION.

TABLE 9.12

AIRCRAFT ACCIDENTS, ACCIDENT RATES, AND FATALITIES
 COMMUTER AIR CARRIERS: 1977 - 1981
 (U.S. AIR CARRIERS OPERATING UNDER 14 CFR 135)
 ALL SCHEDULED SERVICE

YEAR	NUMBER OF ACCIDENTS		AIRCRAFT MILES Flown (000)	ACCIDENT RATE PER MILLION AIRCRAFT MILES Flown		FATALITIES
	TOTAL	FATAL		TOTAL ACCIDENTS	FATAL ACCIDENTS	
1977R	42(6)	9(2)	194,166	0.22	0.05	33
1978R	55(4)	13(1)	224,228	0.25	0.06	47
1979R	51(9)	14(3)	214,330	0.24	0.07	65
1980R	37(8)	7(2)	202,100	0.18	0.03	36
1981P	28(1)	9(0)	178,500	0.16	0.05	35

P - PRELIMINARY DATA

R - REVISED

NOTE: RATES ARE BASED ON ALL ACCIDENTS INCLUDING THOSE ACCIDENTS INVOLVING OPERATORS (THE NUMBERS IN PARENTHESIS) NOT REPORTING TRAFFIC DATA TO THE CAB.

SOURCE: NATIONAL TRANSPORTATION SAFETY BOARD.

TABLE 9.13

COMPARATIVE ACCIDENT DATA: 1971 THROUGH 1980
 (PASSENGER FATALITIES PER 100 MILLION PASSENGER-MILES)

YEAR	PASSENGER AUTOMOBILES AND TAXIS	BUSES	RAILROAD PASSENGER TRAINS	DOMESTIC SCHEDULED AIR TRANSPORT PLANES
1971	1.90	.19	.24	.15
1972	1.90	.19	.53	.13
1973	1.70	.24	.07	.10
1974	1.50	.21	.07	.12
1975	1.40	.15	.08	.08
1976	1.34	.17	.05	.003
1977	1.33	.13	.04	.04
1978	1.30	.17	.13	.01
1979	1.31	.15	.05	.12
1980	1.32	.15	.04	.01

SOURCE: NATIONAL SAFETY COUNCIL'S "ACCIDENT FACTS".

TABLE 9.14

1981 AIRLINES
 (AIR CARRIERS OPERATING UNDER 14 CFR 121)
 ACCIDENTS, FATALITIES, AND RATES
 -PRELIMINARY DATA-

	SCHEDULED	UNSCHEDULED
<u>ACCIDENTS</u>		
TOTAL	24	1
FATAL	4	0
<u>FATALITIES</u>	4	0
<u>AIRCRAFT HOURS FLOWN (000)</u>	6,560	235
<u>DEPARTURES</u>	5,235,000	116,800
<u>ACCIDENT RATE PER 100,000</u>		
<u>HOURS FLOWN**</u>		
TOTAL	0.37	0.43
FATAL	0.06	0.00
<u>ACCIDENT RATE PER 100,000</u>		
<u>DEPARTURES</u>		
TOTAL	0.46	0.86
FATAL	0.08	0.00

SOURCE: NATIONAL TRANSPORTATION SAFETY BOARD.

EXPOSURE DATA ESTIMATE SOURCE: CAB AND FAA.

TABLE 9.15
 ACCIDENTS, FATALITIES, AND RATES
 AIRLINES--1977 - 1981
 (U.S. AIR CARRIERS OPERATING UNDER 14 CFR 121)
 ALL SCHEDULED SERVICE

	1977R	1978R	1979R	1980R	1981P
<u>ACCIDENTS</u>					
TOTAL	21	21	24	15	24
FATAL	3	5	4	0	4
<u>FATALITIES</u>	78	160	351	0	4
<u>AIRCRAFT HOURS FLOWN (000)*</u>	5,801	6,032	6,700	6,990	6,560
<u>AIRCRAFT MILES FLOWN (000)</u>	2,419	2,520	2,736	2,890	2,695
<u>DEPARTURES*</u>	4,934,094	5,015,939	5,379,852	5,479,000	5,235,000
<u>ACCIDENT RATE PER 100,000</u>					
<u>HOURS FLOWN</u>					
TOTAL	0.36	0.35	0.36	0.22	0.37
FATAL	0.05	0.08	0.06	0.00	0.06
<u>ACCIDENT RATE PER MILLION</u>					
<u>MILES FLOWN</u>					
TOTAL	0.01	0.01	0.01	0.01	0.01
FATAL ^{1/}	0.00	0.00	0.00	0.00	0.00
<u>ACCIDENT RATE PER 100,000</u>					
<u>DEPARTURES</u>					
TOTAL	0.43	0.42	0.45	0.27	0.46
FATAL	0.06	0.10	0.07	0.00	0.08

1/ROUNDED TO 0.00

R REVISED

P PRELIMINARY

*EXPOSURE DATA ESTIMATE SOURCE: CAB.

TABLE 9.16

ACCIDENTS, FATALITIES, AND RATES
ON-DEMAND AIR TAXIS--1977 - 1981
(U.S. AIR CARRIERS OPERATING UNDER 14 CFR 135)
NONSCHEDED OPERATIONS

YEAR	NUMBER OF ACCIDENTS		FATALITIES	*AIRCRAFT HOURS FLOWN (000)	ACCIDENT RATE PER 100,000	
	TOTAL	FATAL			AIRCRAFT HOURS FLOWN	TOTAL ACCIDENTS
1977R	175	35	122	3,064	5.71	1.14
1978R	216	57	160	3,135	6.89	1.82
1979R	173	36	84	3,374	5.13	1.07
1980R	164	42	88	3,535	4.64	1.19
1981P	138	34	95	3,690	3.74	0.92

SOURCE: NATIONAL TRANSPORTATION SAFETY BOARD.

*SOURCE OF ESTIMATE: FAA.

P - PRELIMINARY.

R - REVISED.

X. AERONAUTICAL PRODUCTION AND IMPORTS/EXPORTS

The aircraft production information presented in this chapter was obtained from the Bureau of Census, Form M37G: Complete Aircraft Plant Report. The shipment data shows the number of civil aircraft shipped by the United States manufacturers and includes both aircraft shipped within the United States and those exported.

Import and export data were obtained from the Aerospace Industries Association of America, Inc. and were based on Bureau of the Census data from special monthly compilation of Annual Reports 246 and 446, respectively.

TABLE 10.1

TOTAL CIVIL AIRCRAFT PRODUCTION, WEIGHT, AND COST CALENDAR YEARS 1972-1981

Calendar Year	Number of Aircraft ^{1/}	Airframe Weight (000 lbs.)	Value Complete Units (\$000)	Average Unit Cost
1972	11,435	47,905	3,270,185	\$ 285,980
1973	14,748	64,183	4,629,662	313,918
1974	15,117	64,285	4,967,752	328,620
1975	15,196	60,393	3,745,153	246,457
1976	16,446	52,110	3,486,841	212,018
1977	17,605	45,398	4,666,245	265,052
1978	17,397	52,060	8,208,728	471,847
1979	17,924	77,327	11,047,147	616,332
1980	11,777	97,068	13,043,076	1,107,504
1981	10,471	92,788	14,041,078	1,340,949

^{1/} Represents fixed wing (powered) aircraft only.

TABLE 10.2
NUMBER OF SHIPMENTS OF COMPLETE CIVIL AIRCRAFT

ITEM	1974	1975	1976	1977	1978	1979	1980	1981(P)
COMPLETE CIVIL AIRCRAFT	15,070	15,086	16,641	18,159	18,882	17,924	13,130	11,409
FIXED WING	14,261	14,248	15,820	17,175	18,049	16,883	11,777	10,448
SINGLE ENGINE	N/A	N/A	N/A	N/A	14,382	13,044	8,175	6,757
MULTIENGINE	N/A	N/A	N/A	N/A	3,667	3,839	3,602	3,649
ROTORCRAFT	809	838	821	984	833	1,041	1,353	1,003
OTHER AIRCRAFT	N/A	N/A	N/A	N/A	(D)	N/A	(D)	(D)
BALLOONS, DIRIGIBLES, AIRSHIPS	N/A	N/A	N/A	N/A	(D)	N/A	(D)	(D)
GLIDERS	N/A	N/A	N/A	N/A	(D)	N/A	(D)	(D)
OTHER	N/A	N/A	N/A	N/A	(D)	N/A	(D)	(D)

SOURCE: "CURRENT INDUSTRIAL REPORTS: COMPLETE AIRCRAFT AND AIRCRAFT ENGINES," M376-13; DEPARTMENT OF COMMERCE,
BUREAU OF THE CENSUS.

(D) DATA WITHHELD TO AVOID DISCLOSING FIGURES FOR INDIVIDUAL COMPANIES.

N/A = DATA NOT AVAILABLE

(P) PRELIMINARY DATA.

TABLE 10.3

NUMBER OF U.S. IMPORTS OF AEROSPACE PRODUCTS
1977 - 1981

	1981	1980	1979	1978	1977
AIRCRAFT USED OR REBUILT, CIVIL	160	100	97	93	111
HELICOPTERS, CIVIL	213	177	91	78	56
AIRCRAFT, SINGLE-ENGINE, CIVIL	9	6	3	6	*
AIRCRAFT, MULTIEGINE UNDER 4400 LBS., CIVIL	2	6	5	47	*
AIRCRAFT, MULTIEGINE, 4,400 TO 10,000 LBS., CIVIL	123	119	86	87	74
AIRCRAFT, MULTIEGINE, 10,000 TO 33,000 LBS., CIVIL	218	156	102	50	48
AIRCRAFT, MULTIEGINE, OVER 33,000 LBS., CIVIL	8	16	9	5	15
BALLOONS, AND AIRSHIPS, CIVIL	0	0	0	0	0

* NUMBER INCLUDED IN TOTAL FOR MULTIEGINE, 4400 TO 10,000 LBS.

SOURCE: AEROSPACE INDUSTRIES ASSOCIATION, INC. BASED ON BUREAU OF THE CENSUS DATA
FROM SPECIAL MONTHLY COMPIILATION OF ANNUAL REPORT, FT-410.

TABLE 10-4

NUMBER OF U.S. EXPORTS OF AEROSPACE PRODUCTS
1977 - 1981

	1981	1980	1979	1978	1977
AIRCRAFT USED OR REBUILT, CIVIL	501	494	578	449	477
AIRCRAFT HELICOPTER, NEW, UNDER 2200 LBS., CIVIL	268	335	294	243	233
AIRCRAFT, HELICOPTER, NEW, OVER 2200 LBS., CIVIL	185	190	165	125	88
AIRCRAFT, SINGLE-ENGINE, NEW CIVIL	1,800	2,172	2,821	2,640	2,664
AIRCRAFT, MULTIEGINE, NEW, UNDER 4400 LBS., CIVIL	371	546	645	455	273
AIRCRAFT, MULTIEGINE, NEW, OVER 4400 LBS., UNDER 10,000 LBS., CIVIL	426	432	360	339	*
AIRCRAFT, MULTIEGINE, NEW, OVER 10,000 LBS., UNDER 33,000 LBS., CIVIL	20	28	52	37	532
AIRCRAFT, PASSENGER, NEW, OVER 33,000 LBS., CIVIL	236	215	172	99	83
AIRCRAFT, CARGO, NEW, OVER 33,000 LBS., CIVIL	7	8	13	3	4
AIRCRAFT OTHER, NEW, OVER 33,000 LBS., INCLUDING COMBINATIONS, CIVIL	12	14	15	9	14
AIRCRAFT OTHER, NEW, INCLUDING BALLOONS, GLIDERS & KITES, CIVIL	0	0	0	0	1/

* NUMBER INCLUDED IN TOTAL FOR MULTIEGINE, OVER 10,000 LBS., UNDER 33,000 LBS.

SOURCE: AEROSPACE INDUSTRIES ASSOCIATION, INC. BASED ON BUREAU OF THE CENSUS DATA
FROM SPECIAL MONTHLY COMPILATION OF ANNUAL REPORT, FT-446.

1/ DATA FOR THIS CATEGORY NOT AVAILABLE FOR 1977.

COMMON ACRONYMS

AAS	Airport Advisory Service
ADF	Automatic Direction Finder
ARSR	Air Route Surveillance Radar
ARTCC	Air Route Traffic Control Center
ASR	Airport Surveillance Radar
ATC	Air Traffic Control
ATCT	Airport Traffic Control Tower
CAB	Civil Aeronautics Board
CS/T	Combined Station/Tower
DME	Distance Measuring Equipment
DVFR	Defense Visual Flight Rules
FAR	Federal Aviation Regulation
FSS	Flight Service Station
ICAO	International Civil Aviation Organization (Montreal, Canada)
IFR	International Flight Rules
IFSS	International Flight Service Station
ILS	Instrument Landing System
LRNAV	Long Range Navigation
MLS	Microwave Landing System
NAS	National Airspace System
NAVAIDS	Navigational Aids
NOTAMS	Notice to Airmen
NTSB	National Transportation Safety Board
RNAV	Area Navigation
VFR	Visual Flight Rules
VHF	Very High Frequency
VOR	Very High Frequency Omnidirectional Radio Range

GLOSSARY

Active Aircraft--All legally registered civil aircraft which flew one or more hours.

Aerial Observation--See Primary Use.

Aerial Application--See Primary Use.

Air Carriers--The commercial system of air transportation consisting of the certificated route air carriers, air taxis (including commuters), supplemental air carriers, commercial operators of large aircraft, and air travel clubs.

- o Certificated route air carrier--An air carrier holding a Certificate of Public Convenience and Necessity issued by the Civil Aeronautics Board authorizing the performance of scheduled service over specified routes, and a limited amount of nonscheduled service.
- o Air taxi--The classification of air carriers which transports persons, property, and mail using small aircraft (under 30 seats or a maximum payload capacity of less than 71,500 pounds). An air taxi does not hold a Certificate of Public Convenience and Necessity nor economic authority as issued by the Civil Aeronautics Board.
- o Commuter air carrier--an air taxi which performs at least five round trips per week between two or more points and publishes flight schedules which specify the times, days of the week, and points between which such flights are performed.
- o Supplemental air carrier--An air carrier which holds a Certificate of Public Convenience and Necessity issued by the Civil Aeronautics Board, authorizing performance of passenger and cargo charter services supplementing the scheduled service of the certificated route air carriers. Both international and domestic charter operations are for a temporary period. The authority of supplemental air carriers to engage in military charters is of an indefinite period. In addition, they can perform on an emergency basis, as may be authorized by the Civil Aeronautics Board, scheduled operations including the transportation of individually ticketed passengers and individually waybilled cargo.
- o Commercial operator--a person who, for compensation or hire, engages in the carriage of aircraft in air commerce of persons or property other than as an air carrier or foreign air carrier.
- o Commercial operator of large aircraft--commercial operator operating aircraft of more than 12,500 pounds maximum certificated takeoff weight.
- o Air Travel Club--a person who engages in the carriage by airplanes of persons who are required to qualify for that carriage by payment of an assessment, dues, membership fee, or other similar types of remittance.

Aircraft Contacted--Aircraft with which the flight service stations (FSS) have established radio communications contact. One count is made for each en route, landing, or departing aircraft contacted by an FSS regardless of the number of contacts made with an individual aircraft during the same flight. A flight contacting five FSS's would be counted as five aircraft contacted.

Aircraft Handled--See IFR Aircraft Handled.

Aircraft Operation--The airborne movement of aircraft in controlled or noncontrolled airport terminal areas and about given en route fixes or at other points where counts can be made. There are two types of operations--local and itinerant.

- o Local operations are performed by aircraft which:
 - (a) Operate in the local traffic pattern or within sight of the airport.
 - (b) Are known to be departing for, or arriving from, flight in local practice areas within a 20-mile radius of the airport.
 - (c) Execute simulated instrument approaches or low passes at the airport.
- o Itinerant operations are all aircraft operations other than local operations.

Aircraft Type--A term used in this publication in grouping aircraft by basic configuration--fixed-wing, rotorcraft, glider, dirigible, and balloon.

Air Defense Identification Zone--The area of airspace over land or water within which the ready identification, the location, and the control of aircraft are required in the interest of national security.

Airline Transport Pilot--See Pilot.

Airman--A pilot, mechanic, or other licensed aviation technician.

Airman Certificate--A document issued by the Administrator of the Federal Aviation Administration certifying that the holder complies with the regulations governing the capacity in which the certificate authorizes the holder to act as an airman in connection with aircraft.

Airport--An area of land or water that is used or intended to be used for the landing and takeoff of aircraft, and includes its buildings and facilities, if any.

Airport Advisory Service (AAS)--A service provided by flight service stations at airports not served by a control tower. This service consists of providing information to landing and departing aircraft concerning wind direction and velocity, favored runway, altimeter setting, pertinent known traffic, pertinent known field conditions, airport taxi routes and traffic patterns, and authorized instrument approach procedures.

Airport Surveillance Radar (ASR)--Radar providing position of aircraft by azimuth and range data. ASR does not provide elevation data. It is designed for range coverage up to 60 nautical miles and is used by terminal area air traffic control.

Airport Traffic--Aircraft operating in the air or on an airport surface exclusive of loading ramps and parking areas.

Airport Traffic Control Service--Air traffic control service provided by an airport traffic control tower for aircraft operating on the movement area and in the vicinity of an airport.

Airport Traffic Control Tower (ATCT)--A central operations facility in the terminal air traffic control system, which consists of a tower cab structure, including an associated IFR room if radar equipped, and uses air/ground communications, radar, visual signaling, and other devices to provide safe and expeditious movement of terminal air traffic.

Airports of Entry--Aircraft may land at these airports without prior permission to land from U.S. Customs.

Air Route Traffic Control Center (ARTCC)--A facility established to provide air traffic control service to aircraft operating on IFR flight plans within controlled airspace, and principally during the en route phase of flight.

Air Taxi--See Air Carrier and Primary Use.

Air Traffic Control (ATC)--A service operated by appropriate authority to promote the safe, orderly, and expeditious flow of air traffic.

Air Traffic Control Facility--A facility which provides air traffic control services located in the U.S., its possessions and territories, and in foreign countries especially established by international agreement.

Air Traffic Hub--Air traffic hubs are not airports; they are the cities and Standard Metropolitan Statistical Areas requiring aviation services. Communities fall into four classes as determined by each community's percentage of the total enplaned passengers in scheduled service of the fixed-wing operations of the domestic certificated route air carriers in the 50 States, the District of Columbia, and other U.S. areas designated by the Federal Aviation Administration.

- o Large air traffic hub--a community enplaning 1.00 percent or more of the total enplaned passengers.
- o Medium air traffic hub--a community enplaning from 0.25 to 0.99 percent of the total enplaned passengers.
- o Small air traffic hub--a community enplaning from 0.05 to 0.24 percent of the total enplaned passengers.
- o Nonhub--a community enplaning less than 0.05 percent of the total enplaned passengers.

Air Travel Club--See Air Carrier.

All-Cargo Carrier (418)--One of a class of air carriers holding an All Cargo Air Service Certificate issued under section 418 of the Federal Aviation Act and certificated in accordance with FAR 121 to provide domestic air transportation of cargo.

All-Cargo Carrier--One of a class of air carriers holding temporary Certificates of Public Convenience and Necessity issued by the Civil Aeronautics Board, which authorize the performance of scheduled air freight, express, and mail transportation over specified routes, as well as nonscheduled operations which may include passengers.

Altitude Encoding (Automatic Altitude Reporting)--An aircraft altitude transmitted via the Mode C transponder feature that is visually displayed in 100 feet increments on the ground radar scope having readout capability.

American Flag Carrier--See U.S. Flag Carrier.

Approach Control Facility--A terminal area traffic control facility providing approach control service.

Approach Control Service--Air traffic control service provided by an approach control facility for arriving and departing aircraft and, on occasion, tower en route control service.

Area Navigation (RNAV)--A method of using navigation instruments that allows pilots flexibility to fly direct routes between waypoints or offset from published or established routes/airways at specified distance and direction.

Automatic Direction Finder (ADF)--An aircraft radio navigation system which senses and indicates the direction to a nondirectional radio beacon ground transmitter. Direction is indicated to the pilot as a magnetic bearing or as a relative bearing to the longitudinal axis of the aircraft.

Automatic Pilot--An aircraft can be controlled about the roll, pitch, and yaw axis by use of an automatic pilot. Information from VOR, ILS, MLS, and other navigation aids can be coupled to the automatic pilot for en route and approach flights.

Business Transportation--See Primary Use.

Certificated Route Air Carrier--See Air Carrier.

Combined Station Tower--A combined facility (see Airport Traffic Control Tower and Flight Service Station).

Commercial Operator--See Air Carrier.

Commercial Pilot--See Pilot.

Commuter Air Carrier--See Air Carrier and Primary Use.

Controlled Airspace--Airspace control area designated as a continental control area, control zone, terminal control area, or transition area, within which some or all aircraft may be subject to air traffic control.

Defense Visual Flight Rules (DVFR)--A flight within an Air Defense Identification Zone conducted under the visual flight rules in Federal Aviation Regulation, Part 99.

Distance Measuring Equipment (DME)--Airborne and ground equipment used to measure, in nautical miles, the slant range distance of an aircraft from the DME navigational aid.

Domestic Operations--In general, operations within and between the 50 States, and the District of Columbia.

Executive Transportation--See Primary Use.

Express (Air)--Property transported by air under published air express tariffs filed with the Civil Aeronautics Board.

Flight Advisory Service--Advice and information provided by a facility to assist pilots in the safe conduct of flight and aircraft movement.

Flight Plan--Specified oral or written information about the intended flight of an aircraft that is filed with air traffic control.

Flight Service Station (FSS)--Air Traffic Service facilities within the National Airspace System (NAS) which provide preflight pilot briefings and en route communications with VFR flights, assist lost IFR/VFR aircraft, assist aircraft having emergencies, relay Air Traffic Control clearances, originate, classify, and disseminate Notices to Airmen, broadcast aviation weather and NAS information, receive the close flight plans, monitor radio NAVAIDS, notify search and rescue units of missing VFR aircraft, and operate the national weather teletypewriter system. In addition, at selected locations, FSSs take weather observations, issue airport advisories, administer airmen written examinations, and advise Customs and Immigration of across-the-border flights.

Foreign Flag Air Carrier--An air carrier other than a U.S. flag air carrier engaged in international air transportation (see also U.S. Flag Carrier).

Foreign Mail--Mail transported outside the United States by U.S. flag carriers for a foreign government.

General Aviation--That portion of civil aviation which encompasses all facets of aviation except air carriers.

Glide Slope--See Instrument Landing System.

Heliport--An area of land, water, or any structure used or intended to be used for the landing and takeoff of helicopters.

Hub--See Air Traffic Hub.

IFR Aircraft Handled--The number of IFR departures multiplied by two plus the number of IFR overs. This definition assumes that the number of departures (acceptances, extensions, and originations of IFR flight plans) is equal to the number of landings (IFR flight plans closed).

IFR Departure--An IFR departure includes IFR flights originating in a center's area, accepted by the center under SOLF EN ROUTE clearance procedures, and extended by the center.

IFR Over--An IFR flight that originates outside the ARTCC area and passes through the area without landing.

Inactive Aircraft--All legally registered civil aircraft which flew zero hours.

Industrial/Special--See Primary Use.

Instructional Flying--See Primary Use.

Instrument Approach--An approach to an airport, with intent to land, by an aircraft flying in accordance with an IFR flight plan, when the visibility is less than 3 miles and/or when the ceiling is at or below the minimum initial altitude.

Instrument Flight Rules (IFR)--Rules governing the procedures for conducting instrument flight. Also a term used by pilots and controllers to indicate type of flight plan.

Instrument Landing System (ILS)--A precision instrument approach system which normally consists of the following electronic and visual aids:

- o Localizer--Provides course guidance to the runway.
- o Glide Slope--Provides vertical guidance during approach.
- o Marker Beacon--Provides aural and/or visual identification of a specific position along an instrument approach landing.

Instrument Operation--An aircraft operation in accordance with an IFR flight plan or an operation where IFR separation between aircraft is provided by a terminal control facility or air route traffic control center.

International Flight Service Station (IFSS)--A central operations facility in the flight advisory system, staffed and equipped to control aeronautical point-to-point telecommunications, and air/ground telecommunications with pilots operating over international territory or waters, which provides flight plan following, weather information, search and rescue action, and other flight assistance operations.

International Operations--In general, operations outside the territory of the U.S., including operations between the U.S. and foreign countries, and the U.S. and its territories or possessions. Includes both the combination passenger/cargo carrier and the all-cargo carriers engaged in international and territorial operations.

Itinerant Operation--See Aircraft Operation.

Jet Route--A route designed to serve aircraft operations from 18,000 feet to 45,000 feet.

Landing Rights Airports--Any aircraft may land at one of these airports after securing prior permission to land from U.S. Customs.

Large Air Traffic Hub--See Air Traffic Hub.

Localizer--See Instrument Landing System.

Local Operation--See Aircraft Operation.

Long Range Navigation--A method of navigation that permits navigation over long distances. This is in contrast to the relatively short range navigation provided by the VOR system.

Marker--See Instrument Landing System.

Medium Air Traffic Hub--See Air Traffic Hub.

Microwave Landing System (MLS)--An instrument landing system operating in the microwave spectrum which provides lateral and vertical guidance to aircraft having compatible avionics equipment.

Mode C--See Altitude Encoding.

Nondirectional Radio Beacon--A radio beacon transmitting nondirectional signals whereby the pilot of an aircraft equipped with direction finding equipment can determine headings to or from the radio beacon and "home" on a track to or from the station.

Nonhub--See Air Traffic Hub.

Notice to Airmen--A notice containing information concerning the establishment, condition or change in any component of, or hazard in the National Airspace System, the timely knowledge of which is essential to personnel concerned with flight operations.

Other--See Primary Use.

Other Work Use--See Primary Use.

Over--See IFR Over.

Passenger/Cargo Air Carrier--One of a class of air carriers holding Certificates of Public Convenience and Necessity issued by the Civil Aeronautics Board, authorizing the performance of scheduled air transportation of passengers and property over specified routes.

Personal Flying--See Primary Use.

Pilot--

- o Student Pilot--A student pilot may not operate an aircraft that is carrying a passenger or that is carrying property for compensation or hire.
- o Private Pilot--A private pilot may not act as a pilot-in-command of an aircraft that is carrying passengers for compensation or hire nor may a private pilot act as pilot-in-command for compensation or hire.
- o Commercial Pilot--A commercial pilot may act as pilot-in-command of an aircraft carrying passengers for compensation or hire and act as pilot-in-command of an aircraft for compensation or hire.
- o Airline Transport Pilot--An airline transport pilot may act as a pilot-in-command of an aircraft engaged in air carrier service.

Pilot Briefing--Information furnished a pilot to assist in flight planning. Principal items are weather conditions, notices to airmen, routes, and preparation and handling of the flight plan.

Positive Control--Control of all air traffic, within designated airspace, by air traffic control.

Primary Use--The use category in which an aircraft flew the most hours. The 11 use categories are defined below:

- o Aerial Application--Any use of an aircraft for work purposes which concerns the production of foods, fibers, and health control in which the aircraft is used in lieu of farm implements or ground vehicles for the particular task accomplished. This includes firefighting operations, the distribution of chemicals or seeds in agriculture, reforestation, or insect control.
- o Aerial Observation--Any use of an aircraft for aerial mapping/photography, survey, patrol, fish spotting, search and rescue, hunting, highway traffic advisory, or sightseeing; not included under Part 135.
- o Commuter Air Carrier--An air taxi that performs at least five scheduled round trips per week between two or more points or carries mail.

- o Demand Air Taxi--Use of an aircraft operating under Federal Aviation Regulations, Part 135, passenger and cargo operations, including charter and excluding commuter air carrier.
- o Business Transportation--Use of an aircraft not for compensation or hire by individuals for the purposes of transportation required by business in which they are engaged.
- o Executive/Corporate Transportation--Any use of an aircraft by a corporation, company, or other organization for the purposes of transporting its employees and/or property not for compensation or hire, and employing professional pilots for the operation of the aircraft.
- o Instructional Flying--Any use of an aircraft for the purpose of formal instruction with the flying instructor aboard, or with the maneuvers on the particular flight(s) specified by the flight instructor; excludes proficiency flying.
- o Personal Flying--Any use of an aircraft for personal purposes not associated with a business or profession, and not for hire. This includes maintenance of pilot proficiency.
- o Rental Aircraft--Aircraft owned for the purpose of renting; commercial flying club, leased, and rental aircraft activity.
- o Other Work Use--Any aircraft used for construction work (not included under Part 135), helicopter, hoist, towing gliders, or parachuting.
- o Other--Any other use of an aircraft not included above. (Example: experimentation, R&D; testing, demonstration, government)

Private Pilot--See Pilot.

Private-Use Airport--An airport which is not open for the use of the general public.

Privately Owned Airport--An airport which is owned by a private individual or corporation.

Publicly Owned Airport--An airport which is publicly-owned and under control of a public agency.

Public-Use Airport--An airport open to the public without prior permission, and without restrictions within the physical capacities of available facilities. May or may not be publicly owned.

Radar Altimeter--Aircraft instrument that makes use of the reflection of radio waves from the ground to determine the height of the aircraft above the surface.

Registered Aircraft--Aircraft registered with the Federal Aviation Administration.

Rental Aircraft--See Primary Use.

RNAV--See Area Navigation.

Small Air Traffic Hub--See Air Traffic Hub.

Stolport--An airport specifically designed for STOL (Short Take-off and Landing) aircraft, separate from conventional airport facilities.

Student Pilot--See Pilot.

Supplemental Air Carrier--See Air Carrier.

Terminal Area--A general term used to describe airspace in which approach control service or airport traffic control service is provided.

Tower--See Airport Traffic Control Tower.

Transponder--The airborne radar beacon receiver/transmitter portion of the Air Traffic Control Beacon System that automatically receives radio signals from interrogators on the ground and selectively replies with specific reply pulse-on-pulse group, only to those interrogations being received on the mode to which it is set to respond. Each aircraft transponder is capable of replying to 4,096 codes as selected by the pilot. Provides the air traffic controller positive location and, in some cases, altitude information.

U.S. Flag Carrier or American Flag Carrier--One of a class of air carriers holding a Certificate of Public Convenience and Necessity issued by the Civil Aeronautics Board, approved by the President, authorizing scheduled operations over specified routes between the United States (and/or its territories) and one or more foreign countries. (See also Foreign Flag Air Carrier.)

VFR Flight--Flight conducted in accordance with Visual Flight Rules.

VHF Communications--Provides radio voice communications between aircraft and ground stations, also between aircraft. Very High Frequency (VHF) is limited in range (line of sight) and usually used for air traffic communications.

VOR--Very high frequency omnidirectional radio range. Used as the basis for navigation in the National Airspace System.

VORTAC--A navigation aid providing azimuth and distance measuring equipment at one site.

Weather Radar--Provides the flight crew with visual display of weather that could contain turbulence. The system's primary function is to assist in turbulence avoidance, although most airborne radar systems are also capable of terrain mapping.

Below is a list of the publications compiled by the Information and Statistics Division. Questions may be directed to us by telephoning (202) 426-3791 or writing: Federal Aviation Administration, Information and Statistics Division, AMS-200, 800 Independence Avenue, SW, Washington, DC 20591.

FAA Statistical Handbook of Aviation is a convenient source for historical data. It presents statistical information pertaining to the Federal Aviation Administration, the National Airspace System, Airports, Airport Activity, U.S. Civil Air Carrier Fleet, U.S. Civil Air Carrier Operating Data, Airmen, General Aviation Aircraft, and Aircraft Accidents.

Reporting period: **Calendar Year**
Latest edition: **1981 data**
Order from: **National Technical Information Service
or U.S. Government Printing Office**

Date 1982 information
will be available. Various

Date next publication
is scheduled: December 1983 (1982 data)

U.S. Civil Airmen Statistics is an annual study of detailed airmen statistics. It contains calendar year statistics on pilots and nonpilots and the number of certificates issued.

Reporting period: **Calendar Year**
Latest edition: **1981 data**
Order from: **Information & Statistics Division**

Date 1982 information
will be available. March 1983

Date next publication
is scheduled: June 1983 (1982 data)

Census of U.S. Civil Aircraft is an annual publication that includes statistical data on the registered civil fleet, air carrier aircraft, and general aviation aircraft--both registered and active, detailed reports for general aviation aircraft by owner's state and country, and registered aircraft by make and model.

Reporting period: **Calendar Year**
Latest edition: **1981 data**
Order from: **National Technical Information Service**

Date 1982 information
will be available: May 1983

**Date next publication
is scheduled:** September 1983 (1982 data)

FAA Air Traffic Activity furnishes terminal and en route air traffic activity information (i.e., operations, flight plans filed) of the National Airspace System. The data is from the FAA-operated Airport Traffic Control Towers, Air Route Traffic Control Centers, Flight Service Stations, and Approach Control Facilities.

Reporting period:	Fiscal Year
Latest edition:	1981 data
Order from:	National Technical Information Service
Date 1982 information will be available:	January 1983
Date next publication is scheduled:	April 1983 (1981 data)

General Aviation Pilot and Aircraft Activity Survey includes data on the type and source of aircraft flight plan and weather information services, trip length in time and distance, pilot age and certification, estimates of total 1981 general aviation operations, fuel consumption and aircraft miles flown. The survey was conducted by the Federal Aviation Administration with the assistance of the Civil Air Patrol.

Reporting period:	Survey conducted in 3-year intervals
Latest edition:	1978 data
Order from:	National Technical Information Service (Refer to: FAA-MS-79-7)
Date 1981 information will be available:	January 1983
Date next publication is scheduled:	April 1983 (1981 data)

General Aviation Activity and Avionics Survey presents the results of the General Aviation Activity and Avionics Survey conducted to obtain information on the activity and avionics of the U.S. registered general aviation aircraft fleet. The survey reveals estimated flying time of the active general aviation aircraft, and other statistics by manufacturer/model group, aircraft type, state and region of based aircraft, and primary use. Estimates are included on fuel consumption, lifetime airframe hours, avionics, and engine hours.

Reporting period:	Calendar Year
Latest edition:	1980 data
Order from:	National Technical Information Service or U.S. Government Printing Office (Refer to: FAA-MS-81-5)
Date 1981 information will be available:	October 1982
Date next publication is scheduled:	February 1983 (1981 data)

General Aviation Avionics Statistics report presents avionics statistics for the 1976 general aviation aircraft fleet. The statistics are presented in a capacity group framework which enables one to relate airborne avionics equipment to the capability for a general aviation aircraft to function in the National Airspace System.

Reporting period:	Calendar Year
Latest edition:	1979 data
Order from:	National Technical Information Service
Date next publication is available:	Last Edition

FAA Directory published three times each year, it contains six sections of data: Washington/Region/Center headquarters; field facilities; regional area maps and organizational charts; alphabetical listing; special interest groups; and, a glossary.

Reporting period:	Every six months
Latest edition:	May 1982
Order from:	Government Printing Office
Date next publication is available	Late Fall 1982

Airport Activity Statistics of Certificated Route Air Carriers joint publication of the Federal Aviation Administration and the Civil Aeronautics Board furnishes airport activity of the certificated route air carriers. Included in the data are passenger enplanements, tons of enplaned freight, express and mail. Both scheduled/nonscheduled service and domestic/international operations shown by airport and carrier are included. This report includes departures by airport, carrier and type of operation, and type of aircraft.

Reporting period:	Calendar Year
Latest edition:	1981 data
Order from:	National Technical Information Service
Date 1982 information will be available.	June 1983
Date next publication is available:	September 1983 (1982 data)

Ordering Information

Addresses are listed below for ordering or information purposes.

- o National Technical Information Service
5285 Port Royal Road
Springfield, VA 22161

Telephone: (703) 487-4650 (Use this number if you have a stock number)
(703) 487-4780 (This is the Identification Section. Use this number if you do not have a stock number.)

Format: Microfiche - \$3.50
Hard copy made from microfiche. Cost depends on number of pages in report.

- o U.S. Government Printing Office
Public Documents Department
Washington, D.C. 20402

Telephone: (202) 783-3238 (orders and inquiries)

Format: Hard copy--original published form. Cost varies with documents.

